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# USSR Report

AGRICULTURE

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## USSR REPORT AGRICULTURE

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## LIVESTOCK FEED PROCUREMENT

### TECHNOLOGY FOR DRYING HIGH MOISTURE CORN FOR GRAIN DISCUSSED

Moscow SELSKAYA ZHIZN in Russian 27 Sep 85 p 1

[Article by M. Glinka, zootechnologist: "Corn in the Ration: Agricultural Overview"]

[Text] As reported by USSR TsSU [Central Statistical Administration, as of 23 September the country's farms and interfarm enterprises had procured 73 million tons of hay (94 percent of the plan), 74 million tons of haylage (117 percent), and 79 million tons of straw, chaff and other threshing-floor feeds (83 percent). One hundred eighty five million tons of ready silage (72 percent) were produced, including almost 1.5 million tons using ears of corn.

Many of the country's enterprises have begun to ensilage grain-stem mass or crushed corn grain with an elevated moisture content. As we know, this new technology increases the harvesting of nutritional elements by about 30 percent per hectare, noticeably decreases the cost of feed and most importantly, greatly decreases energy expenditures. Thus, up to 30 kilograms of fuel are expended to dry every ton of corn grain having a moisture content of up to 14 percent. It turns out that having preserved a million tons of grain with an elevated moisture content the country's enterprises are saving 30,000 tons of fuel! In addition, the opportunity arises to free fields 1-1.5 weeks early for cultivation and sowing of other crops.

It is not surprising that kolkhozes and sovkhoses have willingly begun to assimilate the progressive method of storing valuable feed. In Belgorod Oblast, for example, in only one day on 26 September 1,700 tons of grain-stem mass were stored. Corn seed and ears are prepared into forage at a rapid pace in the Kirghiz SSR, Azerbaijan SSR, Dnepropetrovsk, Kirovograd, Odessa, Poltava, Kherson and a number of other oblasts of the Ukraine, in Krasnodar Kray, and in Rostov, Kursk and Voronezh oblasts of the RSFSR.

In the Maritime-Akhtar region of the Kuban the collective of an interfarm livestock-raising complex has begun to assimilate this progressive technology. Four recently-built haylage silos, with a capacity of over 1,000 tons of mass each, were adapted for storing the new feed. Local efficiency experts equipped a mechanized flow line for crushing ears and for filling storage

facilities. All of these facilities were filled in a matter of days. The same thing took place in Kolkhoz imeni Lenin of Yeyskiy Rayon and in many other Krasnodar enterprises. As their experience showed, four persons are capable of filling a silo in 4-5 days.

In many enterprises of Kursk Oblast mobile mechanized lines for the preparation of kornazh [ensilaged corn] were assembled following the example of Kolkhoz imeni Kuybyshev of Sudzhanskiy Rayon. In Saratov Oblast it was decided to immediately reequip a thousand grain-harvesting combines in order to accelerate this work. Harvesting-transport complexes and specialized mechanized detachments were created here for the purpose of harvesting corn ears and grain with an elevated moisture content for use as forage. Many residents of local villages came to the aid of machine operators to manually pick up the ears that were not picked up by machines.

The procurement and storage of corn grain with an elevated moisture content is a relatively new matter. Although the workers of the All-Union Institute of Feeds proposed this method as long ago as the late 1950's, it has only become widespread during the last 2 years. It is not surprising that some mistakes have been made in the storage of this feed as well as in its use. In Voronezh Oblast Opyt Sovkhoz of Podgorenskiy Rayon was one of the first to begin assimilating this kind of technology. As a result of the imprecise adherence to rules feed with a low nutritive value--only 0.58 feed units per kilogram instead of the normal 0.8 to 0.88--were produced here. On the other hand, there turned out to be more cellulose in the feed than expected. In addition, the grain-stem mass was made into a practically unique feed; only a small amount of grass meal was added to it. It is not surprising that with such a non-full value ration feeder hogs gained only 355 grams per day--they could not have gained any less, as they say.

There are sometimes serious consequences. P. F. Plekhun, zootechnologist at the Ivanovskiy Hogbreeding Complex in Kherson Oblast, reported that after the introduction of preserved moist grain into the ration the weight gain of feeder hogs decreased, the reproduction capabilities of the herd decreased and there were even some cases of death among the animals. This is the result of the deterioration of feed due to improper procurement and storage and of improper use of the feed.

There is no need to speak in detail about the technology for laying in kornazh or corn seed with an elevated moisture content for storage--SELSKAYA ZHIZN discussed this in detail in its 24 July and 21 September issues of last year. I would like to simply remind readers that here it is even more important than in creating silage or haylage to keep track of the moisture content of the mass (26-35 percent for grain; 40-45 percent for ears), to more carefully crush the raw material, to pack it very densely and to completely hermetically seal it with a panel. Trenches cannot be covered with dirt above the panels--this will attract rodents to the feed. The panels also cannot be left uncovered--birds will damage them. A solution was found in Kolkhoz imeni Lenin of Velikobatachanskiy Rayon of Poltava Oblast. There the panel was covered with a layer of dry sand and this layer was covered with another panel. This type of sand cushion, which remains dry and friable, preserves feed dependably.

LIVESTOCK

NONCHERNOZEM ZONE LIVESTOCK SECTOR DEVELOPMENT

UDC 636(470.37)

RSFSR Agricultural Official

Moscow ZHIVOTNOVODSTVO in Russian No 9, Sep 85, pp 2-5

[Article by G. S. Ogryzkin, RSFSR Deputy Minister of Agriculture, under the rubric "Towards the 27th CPSU Congress": "Livestock Raising in the Nonchernozem: Results and Prospects"]

[Text] The party and Soviet government are constantly demonstrating concern about the development of agriculture in the Nonchernozem Zone of the RSFSR, which occupies 21 percent of total agricultural lands. Here are produced over one-third of Russia's agricultural products. In 1974, 1981 and May 1985 resolutions were passed by the CPSU Central Committee and the USSR Council of Ministers concerning agricultural development in the RSFSR Nonchernozem Zone.

It has been possible to accomplish a great deal in the course of the 10 years during which the program of economic and social renewal of the Nonchernozem Zone has been in effect. Over 65 billion rubles of capital investments have been assimilated, fixed production capital of kolkhozes and sovkhoses has doubled and energy capacities have increased by a factor of 1.7. In kolkhozes and sovkhoses over 2.5 million hectares of drained and irrigated lands have been put into operation; cultivation operations have been carried out on an area of 3.3 million hectares. Cultural-living conditions and medical and trade services have improved for village workers; wages for sovkhos and kolkhoz workers have increased. Here there was a noticeable increase in the volume of production and state procurement of agricultural products.

Average annual gross production in the public sector increased by 25 percent as compared to the preceding five-year plan; in agricultural production--by 40 percent.



The development of livestock raising in the Nonchernozem is discussed in the articles of the RSFSR Deputy Agricultural Minister, G. S. Ogryzkin, and of directors and specialists of Orel Oblast organizations and enterprises belonging to the agroindustrial complex.

The most important branch of agricultural production in the Nonchernozem Zone is dairy farming, which comprises 52 percent of total livestock production.

A relatively moderate climate in most of the zone's oblasts and autonomous republics, the responsiveness of the soil to the application of fertilizer, large areas of feed lands and the abundance of haylands and pastures enable farmers to supply animals with the necessary feed. Here the livestock of highly productive breeds--Black Spotted, Kholmogor, Tagil, Yaroslavl, Kostroma, Simmental and others--are raised.

Significant experience has been accumulated concerning the intensive management of livestock raising; all the possibilities exist for stable growth in production output. Livestock raising is essentially capable of supplying the region's population with food and the processing industry with raw materials.

This is confirmed by the work of many enterprises, rayons and entire oblasts. For example, in the kolkhozes and sovkhozes of Leningrad Oblast in 1984 over 3,473 kilograms of milk per cow were produced, in Murmansk Oblast--3,900 kilograms, in the Karelian ASSR--3,575 kilograms and in Moscow Oblast--3,285 kilograms.

In Leningrad and Moscow oblasts and the Karelian ASSR 27-30 percent of enterprises involved in raising dairy cattle produce 4,000 kilograms and more of milk per cow. The livestock farmers of Nemchinovka OPKh [Experimental Model Farm] of Moscow Oblast achieved a high level of productivity in their dairy herd. An average of 7,273 kilograms of milk were produced per cow. This is the result of the sustained labor of specialists and milking-machine operators as concerns the development of a highly productive herd.

Extensive work to raise the productivity of animals is being carried out by Leninskiy Luch Kolkhoz, Krasnogorskiy Rayon of Moscow Oblast, where a firm feed base has been created for livestock, enabling farmers to fully supply demand for various types of feed. Here every hectare of irrigated cultivated pastures yields an average of 8,000-10,000 feed units. The enterprise is carrying out purposeful breeding of dairy livestock. The number of animals in the elite and elite-record classes as well as pure-breed and 4th generation classes comprises over 90 percent. All of this enabled farmers to increase milk yield per each of 1,460 cows to 5,615 kilograms of milk with a butterfat content of 3.6 percent in 1984.

The significant possibilities for intensifying the branch are attested to by the work experience of sovkhozes in Leningrad Oblast. Here the state plan for 4 years of the five-year plan as regards the sale to the state of all types of animal products has been fulfilled ahead of schedule. In the course of the



last three five-year plans a purposeful comprehensive program of agricultural intensification has been put into effect. About 3 billion rubles of capital investments have been directed into this program during the 10th Five-Year Plan and 4 years of the current five-year plan alone; there has been significant growth in the volume of land reclamation and in production and cultural-consumer building.

Capital supplies and the capital-labor ratio in agricultural enterprises increased during this period by a factor of 1.7; the power available per productive worker--by a factor of 1.5. This enabled us to more than triple the saturation of dairy farming with fixed production capital per head of cattle and to raise the supply of feed produced by enterprises themselves. The branch is being developed at a rapid pace. During the last 8 years milk production increased by 27 percent and its sale to the state--by 35 percent.

The entire increase in milk production has been achieved as a result of increasing labor productivity. In 1981-1983 it increased by 16.3 percent in comparison to levels of the 10th Five-Year Plan. Labor expenditures for the production of 1 quintal of milk decreased by 42 percent during the last 8 years and now comprise 4.2 hours.

Such results have been achieved by means of production concentration and specialization, a strengthening of the feed base of enterprises, an improvement in breeding work, overall mechanization of labor-intensive processes on farms, and an improvement in wages, labor discipline and the training of livestock farmers.

Among the series of measures dealing with agricultural development within the oblast, an important place is occupied by measures to strengthen specialization and by the transition to a new system of production organization and management on the basis of specialized production associations of sovkhozes. Twenty three production associations, two interrayon production associations and one scientific-production association have been organized and are in operation. Among production associations enterprises have been singled out that are involved in the production of milk, the raising of replacement calves and the fattening of cattle.

In the oblast's sovkhozes a gradual transition of dairy farming to an industrial base is being implemented. During the years of the 10th and 11th five-year plans 44 dairy-production complexes, two complexes for fattening cattle and 110 farms have been redesigned and modernized with the introduction of progressive technology for the maintenance of livestock and with overall mechanization of production processes.

In the oblast a program to introduce technological specialization has been developed and is being implemented; here feeding and upkeep of animals will depend on their physical status. Farms have birthing departments with dispensaries for calves, yards for dry cows and shops for dairy production. Dairy herds are supplied with primapara heifers raised in specialized enterprises and examined in control-breeding yards.

In order to supply farms with quality replacement animals 23 specialized enterprises have been created to raise about 36,000 heifers and then transfer them to sovkhozes.

In many sovkhozes primapara heifers are examined for productivity. In 135 control-breeding yards 26,000 primapara heifers are evaluated and milked each year. In Krasnyy Oktyabr, Detskoselskiy and other sovkhozes the average milk yield of primapara heifers per lactation exceeds 5,000 kilograms.

In the oblast there are 145 dairy complexes and large dairy farms. Plan capacities according to gross milk production have been assimilated by 96 percent, according to herd size--by 98 percent and according to productivity--by 99 percent. In 1984 in complexes milk yield per cow equalled 3,573 kilograms of milk, or 114 kilograms more than in 1983, and 100 kilograms more than the oblast average. Labor expenditures per quintal of milk comprised 3.5 hours, and in Tsentralnyy, Podlesye and Lensovetovskiy complexes--2.0-2.2 hours.

Growth of labor productivity in dairy farming within the oblast is being dealt with on the basis of the mechanization of labor-intensive processes. In sovkhozes there is full mechanization of milking; manure removal is 95 percent mechanized, feed distribution--84 percent mechanized; and the general level of overall mechanization has been brought up to 84 percent. This enables us to deal with the task of improving labor organization on farms.

Specialization has enabled us to increase the load per single worker to 17.5 cows, which is 11.5 percent higher than the average oblast indicator and 34 percent higher than in brigades and farms which do not employ specialization. The load per operator in machine milking has increased to 46 cows, which exceeds the average oblast indicator by 42 percent.

An improvement in the organization of labor of livestock farmers is also implemented by means of the introduction of a two-shift regimen and a two-cycle arrangement of the work day. At the present time, 68 percent of collectives of farms and complexes are operating according to these progressive forms of labor organization.

In 1979 feed production was made into an independent branch in the oblast. One hundred eighty five brigades are involved in feed procurement, raising feed crops on an area of 111,000 hectares; on 55,000 of these hectares 105 brigades are working according to collective contracts. Within brigades cost-accounting links have been organized to care for long-term pastures and to raise feed root crops; highly-mechanized seasonal detachments have also been organized. The labor of feed procurers is reimbursed according to the quality of procured feed. Measures have been taken within enterprises to preserve the nutritive value of feeds. In the oblast as a whole last year almost half of the procured hay was harvested into hay storage facilities; structures with a capacity of 1.6 million tons were built for the stockpiling of haylage and silage and these capacities satisfy demand by 90 percent. Sixty-five percent of grass meal, granules and briquettes are stored in specially-built capacities.

The entire complex of measures to develop feed production has enabled farmers to increase feed procurement by a factor of 1.3 during the last 8 years. During these years there was a noticeable improvement in the structure of feed rations. The proportion of hay increased by 6 percent and comprised 13 percent within the feed structure; of haylage--by 3 percent, increasing to 11 percent within the feed structure. Feed root crops comprise 8 percent of the ration in terms of nutritive value. The variety of feeds has enabled us to curtail the share of concentrates to 30 percent. For last year's wintering period in Leningrad Oblast as a whole feed supplies per standard head equalled 1,910 feed units, and annual feed expenditures per cow reached 3,900 feed units.

Nevertheless, in many enterprises of the Nonchernozem Zone the level of development of the branch still does not satisfy the needs of the population for dairy products and beef. First and foremost this is the result of poor development of the feed base. In a number of places feed production still has not been made an independent branch and the productivity of feed crops and natural lands remains low. The plan for feed procurement within the zone as a whole remains unfulfilled each year; during the years of the past and current five-year plan (on the average per year) fewer than 2,000 feed units have been expended per head of cattle, and in the kolkhozes and sovkhoses of Ivanovo, Bryansk, Kaluga, Smolensk and a number of other oblasts even smaller amount have been expended.

The situation that has developed with regard to feed supplies does not enable farmers to fully utilize the possibilities for increasing beef production. Average annual beef production (live weight) in the public sector decreased somewhat during the years of the 11th Five-Year Plan as compared to the 10th.

Average daily weight gain in calves equalled an average of only 462 grams in the zone's sovkhoses and kolkhozes in 1981-1984. At the same time, it should be noted that according to the genetic potential of cattle being raised or fattened average daily weight gain should reach no fewer than 800-900 grams. This is attested to by the experience of leading enterprises, fattening platforms and complexes. For example, in Complex imeni 60-Letiye Soyuz SSR of Vologda Oblast plan capacities were assimilated ahead of time. In 1984 average daily weight gain of feeder calves equalled 1,068 grams; the average delivery weight of a single animal at the age of 17 months reached 437 kilograms. Expenditures for the production of 1 quintal of beef equalled 500 feed units; expenditures of labor--4.2 hours. The level of profitability increased to 38.1 percent.

The possibilities for increasing beef production by means of developing beef livestock raising are being utilized inadequately. The majority (73 percent) of beef cows are maintained in the enterprises of the Volgo-Vyatka region. But in the oblasts and autonomous republics of this region the beef herd has been decreasing in recent years.

During the 10th Five-Year Plan the enterprises of Kaluga, Smolensk and Yaroslavl oblasts and Mari ASSR were involved in beef cattle raising, but in subsequent years there was an unjustified rejection of this branch here. Local directors and specialists still have not realized that without beef

cattle it is impossible to solve the meat problem. Beef cattle yields high-quality beef and utilizes natural feed lands, which the Nonchernozem Zone is rich in, with the greatest return. In the press the thought has been expressed more than once that beef cattle raising can serve as the basis for the regeneration of distant villages and settlements where livestock-raising facilities have been preserved and where there are sufficient haylands and pastures but a shortage of manpower. For this reason, it would be most expedient to have herds of beef cattle in such villages.

Crossbreeds developed from the industrial crossbreeding of low-productivity cows and calves not needed to replenish herds from dairy and combination breeds with bulls of beef breeds can be used as the basic source for replenishing commercial beef herds.

In addition to the growth in the size of the herd, beef cattle raising must undergo a transition toward an intensive path of development. As of yet, the qualitative indicators of this branch remain unsatisfactory in the zone as a whole. Average daily weight gain of feeder and pasturing animals is lower by 13 percent than in the herd of cattle as a whole.

In establishing the goal of intensification of the branch, it is essential first and foremost to increase livestock productivity by means of a qualitative improvement of the herd and of a strengthening of the feed base. The basic feed for beef animals is grass from natural haylands and pastures; for this reason, a radical and surface improvement of pastures and their effective use must be dealt with as a priority.

In hogbreeding in the Nonchernozem Zone intensive factors of development have begun to predominate. During the last 4 years the pace of growth in pork production has forestalled growth in the size of the herd by 4 percent.

Specialization and a transition to an industrial base are continuing in the branch. A flow system of pork production has been assimilated in all complexes and in enterprises producing over 500 tons of pork annually.

In the zone there are 68 industrial complexes producing 40 percent of the total volume of pork. Permskiy Complex of Perm Oblast and Complex imeni 50-Letiye SSSR of Kalinin Oblast have assimilated capacities successfully and are operating with stability.

In kolkhozes and sovkhoses the renovation and modernization of hogbreeding farms will continue, with the introduction of progressive technologies for production output. The kolkhozes and sovkhoses of Moscow and Novgorod oblasts and of the Mordovian Autonomous Republic are planning to significantly increase pork production by means of renovating facilities and introducing flow technology.

Half of the oblasts and autonomous republics in the zone raise sheep of the Romanovo breed. Successes have been achieved here, but they have not been as great as desired. The size of the Romanovo herd is being maintained with stability in the enterprises of Vladimir, Vologda and a number of other oblasts. Specialized enterprises are increasing the pace of production output



in sheep raising. In Tutayevo OPKh of Yaroslavl Oblast 100 ewes produced 250 lambs in 1984.

Romanovo sheep raising must be brought back to its former glory. For this purpose measures are being taken everywhere to strengthen the feed base, conditions for the upkeep of animals have improved, new sheep-pen designs have been developed, and progressive technologies and forms of labor organization are being introduced. It is planned to renovate many sheep raising farms. The herd of ewes must increase by over 40 percent.

Poultry raising is developing intensively in the Nonchernozem. During the 10th and 4 years of the current five-year plans 122 poultry raising enterprises have been built and expanded. At the present time in the zone there are 119 poultry factories producing eggs and 52 producing meat. Egg production by hens is increasing annually and in 1984 in the zone as a whole it reached 227 eggs per hen. The enterprises of Kaliningrad Oblast last year produced 249 eggs per hen, of Vologda Oblast--248 and of the Karelian ASSR--246 eggs. In the Serovskaya Poultry Factory of Sverdlov Oblast in 1984 the productivity of hens equalled 256 eggs; here feed expenditures per 1,000 eggs comprised 170 feed units and cost price equalled 41 rubles 48 kopecks.

During the current five-year plan a large amount of attention has been focused on the development of meat poultry raising. Large poultry factories for raising broiler chickens are being put into operation in Tula, Kaluga, Gorkiy and Moscow Oblasts. High average daily weight gains (22-25 grams) have been achieved during the first 6 months of 1985 by the collectives of the following poultry factories: Russko-Vysotskaya (Leningrad Oblast), Sredne-Uralskaya (Sverdlov Oblast), Petelinskaya (Moscow Oblast), and Ryazanskaya (Ryazan Oblast). Feed expenditures for the production of 1 quintal of weight gain comprised about 300 feed units.

Unfortunately, poor results are being achieved in the poultry factories of Pskov and Novgorod oblasts, in Divinskaya Poultry Factory of Smolensk Oblast and in Oktyabrskiy Sovkhoz of Yaroslavl Oblast, where average daily weight gain does not exceed 16 grams. Here the problem is not so much the quality of mixed feeds for broiler chickens as a violation of the technology for feeding and maintaining poultry.

A further increase in livestock production output is planned for the Nonchernozem Zone. A complex of measures has been elaborated for the intensification of branches of livestock raising in the region on the basis of accelerating scientific-technical progress. In dairy farming it is planned to change a significant number of animals over to a combination upkeep system with the use of automatic tethers and milking in highly-productive units in renovated facilities and to introduce a progressive flow-shop technology for milk production and for the reproduction of the herd in all complexes and on all large farms.

An innovation by the agricultural organs of Mozhayskiy Rayon, Moscow Oblast, is deserving of attention. The agroindustrial association of this rayon has carried out an assessment of all livestock raising farms and has determined the volume of needed renovation and necessary equipment. It is planned to



fully and comprehensively mechanize labor in dairy farming and to increase mechanization on cattle farms, in hogbreeding and in poultry raising to 95 percent. The goal of this work is to increase labor productivity in livestock raising during the years of the 12th Five-Year Plan by 25-30 percent. At the same time we are dealing with the problem of equipping farms with needed auxiliary-supplementary and technological structures and objects, approach roads, feed platforms, feed storehouses and with the question of providing dependable energy supplies.

The implementation of measures on the effective use of the potential created within the Nonchernozem Zone will enable kolkhozes and sovkhozes to increase livestock production output and to improve social-everyday work conditions for livestock farmers, thereby making a worthy contribution toward the fulfillment of the country's Food Program.

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#### Orel Oblast APK Effectiveness

Moscow ZHIVOTNOVODSTVO in Russian No 9, Sep 85 pp 5-7

[Article by B. N. Lazko, first deputy chairman of the Orel Oblast agroindustrial association council and director of the agricultural administration of the Orel Oblast executive committee: "Combining Efforts"]

[Text] In early May of this year the presidium of the oblast agroindustrial association council examined and approved the work experience of the collective of the Order of Lenin Korotysh Sovkhoz for its assiduous management and achievement of the highest indicators in the production output of farming and livestock products. This enterprise, which is typical for the southeastern part of Orel Oblast, was in its day among those which lagged behind. Here low yields were achieved, there was an acute manpower shortage and all branches were unprofitable.

In the course of the last three five-year plans the sovkhoz collective has achieving steadfast growth in the production of the basic types of agricultural products, including livestock raising. On the average per year during the 11th Five-Year Plan 3,776 kilograms of milk were produced per cow, and in 1984--3,846 kilograms. Average daily weight gain in cattle equalled 543 grams, and at the final stages of fattening--over 1 kilogram. Four hundred twenty seven quintals of milk and 90 quintals of meat were produced per 100 hectares of agricultural lands.

Breeding work is being carried out on a high level. Pure-breed animals comprise 73 percent of the herd. Replacement of animals is implemented using their own young. An improvement in the genetic potential of livestock in coordination with a good feed base and care enable farmers to steadily increase the productivity of animals and the production of meat and milk. The expenditure of feed and labor per quintal of product is decreasing. In 1984 the sovkhoz received 2.714 million rubles in profits with a production profitability level of 77 percent.

Admittedly, the sovkhos still has shortcomings, the elimination of which will depend greatly on partners within the agroindustrial complex. Who could previously put these partners face to face with agricultural production? In the best of cases party organs could, but they have many other concerns. Now agroindustrial associations have the right to do this. Their authority extends to those same builders and procurers, who have been called upon to more actively develop direct ties and centralized shipment, and to other enterprises and organization of the APK [Agroindustrial complex] as well.

Over 2 years have passed since these associations were created in rayons and oblasts in accordance with the decisions of the May 1982 Plenum of the CPSU Central Committee. This is not a long time, but it has provided us with a basis to say that the restructuring of management is having a positive effect on the development of agriculture and related branches. Last year the oblast completed its plan for the sale of all types of agricultural products ahead of schedule. In comparison to 1981, milk yield per cow, for example, increased by 474 kilograms, average daily weight gain of cattle increased by 98 grams and the cost price of meat, milk, eggs and wool decreased. Over 90 million rubles in profits have been received from their sale, whereas 4 years ago losses equalled 72.7 million rubles. Now livestock raising provides over half of all savings achieved in agriculture.

Farm workers completed the first half of this year with adequate results. In comparison to the same period last year they achieved a 12 percent increase in milk production and a 7 percent increase in meat production. In all of this agroindustrial associations, which are mobilizing the efforts of all APK partners in dealing with existing problems, have been playing a more and more noticeable organizational role.

Let's begin with the fact that RAPO [Rayon Agroindustrial Association] and oblast APO [Agroindustrial Association] directors and specialists now examine every problem in an integrated manner. We can examine the most difficult problem--the development of a firm feed base. Whereas previously this problem was the concern only of kolkhozes and sovkhoszes, today APK partners participate actively in dealing with it. Thus, village builders have been given a precise program concerning building hay sheds, lined silage-haylage trenches, feed shops and other objects. The same task is being dealt with by the organizations of Goskomselkhoztekhnika [State Committee of the Agricultural Equipment Association], which are installing equipment for feed storage and processing and are maintaining it in working condition in addition to providing material-technical supplies to enterprises.

Precise assignments related to supplying livestock raising with various additives and feed phosphates, whole-milk substitutes and mixed feeds have been received by the workers of Selkhozkhimiya [Agricultural Equipment Association], by associations of the dairy industry, by administrations of grain products and by other partners of village workers. Of course, they were involved in this before as well. But their efforts were uncoordinated then, and the final goal was not to increase farm production but to receive the largest amount of monetary resources and profits possible at the expense of kolkhozes and sovkhoszes. Thus partners strived to make their services more

costly. While doing this they did not shun add-ons and errors in calculations.

It cannot be said that agroprom has now been fully successful in avoiding similar negative phenomena. Departmental interests still reveal themselves, but a change for the better has occurred and it is quite considerable. During the last 2 years agroindustrial associations have forced partners to return to kolkhozes and sovkhoses almost 2 million rubles that were illegally removed from their accounts.

The moral aspect of this question is also important here. Does a director of an enterprise or organization feel comfortable in giving instructions on the return of such sums, thereby admitting his guilt? Thus partners have now begun to more strictly control the condition of mutual accounts, striving not to tolerate add-ons or errors. After all, if these are found enterprises will be completely deprived of bonuses.

In order to eliminate this obsolete disease once and for all, agroindustrial associations have introduced a single accounting day when highly trained workers under the direction of RAPO specialists examine accounts dealing with work and services. This innovation was utilized in Orel Oblast for the first time in July 1984. At one of its meetings, the presidium of the oblast agroindustrial association examined and approved the work experience of this RAPO. Now a single accounting day has been introduced in practically all rayons.

The operations of APK partners are also more successfully coordinated in the matter of increasing the level of overall mechanization of livestock raising farms. In February 1984 the presidium of the oblast agroindustrial association confirmed the work program extending until the end of the five-year plan and established highly-defined controls over its fulfillment. As a result, in 1984 alone the level of overall mechanization of livestock raising farms increased from 18 to 38 percent, including of cow sheds--to 50 percent. The centralized delivery of milk with the writing out of receipts in the place of production was organized in 23 percent of kolkhozes and sovkhoses.

The responsibility of procurers for product quality has increased. The dairy industry association, for example, is now participating in acquiring and installing equipment in 78 central dairy points in kolkhozes and sovkhoses. In order to deal with this problem the oblast APO allocated 150,000 rubles to the association from its own centralized funds. The result is evident. In comparison to the 10th Five-Year Plan the sale of grade A milk increased by 37 percent.

Agroindustrial associations are paying a great deal of attention to the introduction of cost accounting and collective contracts. In February of this year this question was discussed in particular at a council meeting of the oblast APO. It was noted that of 523 specialized subdivisions for feed production 470 worked according to the method of collective contracts. During the last 2 years the production of coarse and succulent feeds increased by 12 percent as compared to levels of the 10th Five-Year Plan. Gross livestock production output increased by approximately the same amount. The cost

accounting brigade for feed production of Put K Rassvetu Kolkhoz in Kromskiy Rayon, organized in 1980, increased feed production by a factor of 1.5. The cost price of 100 feed units decreased by 27 percent and comprised less than 5 rubles.

In Kolkhoz imeni 22 Partsyezd of Orlovskiy Rayon the productivity of feed crops equalled 6,100 feed units per hectare last year, and in comparison to the levels of the 10th Five-Year Plan feed production increased by a factor of 3.5. The enterprise became the initiator of socialist competition to achieve the production of 1,000 quintals of milk and 100 quintals of meat per 100 hectares of agricultural lands and to successfully deal with the aforementioned goals by the end of the five-year plan.

The situation involving the introduction of collective contracts is somewhat worse on farms and above all in dairy farming. This form of organization and reimbursement of labor began to be introduced here only last year. As of 1 January it was being assimilated by 448 subdivisions with 15 percent of the herd, 13 percent of calves, 19 percent of hogs, 47 percent of sheep and 60 percent of poultry. A goal has been set to achieve the 100-percent introduction of collective contracts with intrafarm accounts and a check system of controls in sheep raising and poultry raising already this year.

Practical experience shows that the transition to such a progressive management method must be preceded by painstaking work to strengthen farms with highly-trained cadres, to supply enterprises more fully with feeds and to raise the level of mechanization of labor-intensive processes. It is also important to simultaneously introduce regimens of work and relaxation that are more convenient for grain farmers, particularly two-shift work. This provides an incentive for cadres to remain at their jobs and attracts young people.

As an example we can point to the work experience of Kolkhoz imeni 22 Syezd KPSS of Livenskiy Rayon, where livestock farmers have been working in two shifts for several years now. Here a flow-shop technology for milk production and collective contracts have also been introduced. Every pair of operators of milking machines works with 80 cows. They work with four machines and manage to complete milking in less than 2 hours.

Cloak rooms, showers, a cafeteria and a recreation room with a television are at the disposal of livestock farmers. Hot meals have been organized for them. Here is the result--most of the workers of the dairy complex, which maintains 520 cows in addition to replacement calves, are people under the age of 35. In addition to experienced operators and cattlemen one often sees members of the student production brigade from the local secondary school; many of the students will come to replace the old veterans after graduation. The fact that schoolgirls are seriously preparing for their future profession is attested to by the fact that they often receive prizes in oblast socialist competition, and last year Nadezhda Mosolova became the victor among operators of machine milking of cows from school brigades.

The work experience of this enterprise has been generalized and it was recently examined at an out-of-town meeting of the oblast agroindustrial association. The meeting also discussed other questions related to the social



transformation of the village and to the development of stable labor collectives in the oblast's kolkhozes and sovkhozes.

Agroindustrial associations are giving considerable attention to improving the economies of unprofitable and low-profit enterprises. In accordance with their decisions, highly trained specialists who constantly control the course of fulfillment of RAPO and OAPO measures to increase the effectiveness of agricultural production have been assigned to such kolkhozes and sovkhozes. Supplementary capital investments, new equipment and cadres of specialists are being directed into these. Service, building and other APK enterprises and organizations have been given the task of carrying out work and services here in a priority and quality manner.

The results are promising. Whereas in 1983 there were 64 unprofitable enterprises in the oblast, last year their number dropped to 32. Enterprises such as Sovetskaya Rossiya Kolkhoz of Livenesskiy Rayon, Put K Kommunizmu Kolkhoz of Kromskiy Rayon, Mir Kolkhoz of Mtsenskiy Rayon and many others have moved into the ranks of highly profitable enterprises within a short period of time.

In other words, agroindustrial enterprises have been able to do a great deal to raise the effectiveness of branches of agricultural production, including livestock raising. But a great deal still remains to be done, especially as concerns interbranch ties and economic interrelations within the APK system. We cannot hide the fact that unfortunately there are still cases in which service, procurement and processing enterprises strive to build their well-being at the expense of agriculture. The APK has not yet become a single planning, financial and management object, which was the subject of heated discussions at the April 1985 Plenum of the CPSU Central Committee. We feel that calls for cooperation are not the same if each participant continues to pursue his own goals. Evidently the time has come to find more effective ways to "tie together" the interests of partners to the end result, to that which is supplied by fields and farms. There is no doubt that this will enable us to make a weightier contribution to the fulfillment of the Food Program and to worthily greet our party's 27th congress.

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## LIVESTOCK

### ROLE OF SCIENCE IN LATVIAN LIVESTOCK SECTOR DEVELOPMENT

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[Article by A. Yemel'yanov, director of the Latvian Scientific-Research Institute of Livestock Raising and Veterinary Medicine and candidate of veterinary science, under the rubric, "Scientific Achievements--Into Production": "Livestock Raising Today and Tomorrow"]

[Text] The level of development of livestock raising to a large degree characterizes the pace of progress in agriculture. It is no accident that the Food Program foresees the overall transition toward intensive methods of management in livestock raising. Thus, in our republic during the 12th Five-Year Plan it is essential to produce an average of 340,000-345,000 tons of meat in slaughter weight per year, as well as 1.9-2 million tons of milk.

A principled tendency toward further intensification and industrialization of agriculture, including livestock raising, in practical terms signifies the necessity to produce more meat, milk and other farm products with fewer expenditures. In order to achieve the production of the same 2 million tons of milk utilizing the same herd it is necessary to increase milk yield to an average of 3,500 kilograms, with a goal of 4,000 kilograms by 1990. This is no simple task by far, but it is realizable. For example, we are all familiar with the achievements of leading enterprises such as the Yaunpilsskaya Experimental Station of Livestock Raising, Tervete Kolkhoz of Dobelskiy Rayon and Druba and Yaunays Komunars kolkhozes of Salduskiy Rayon, which in 1984 surpassed the 5,000 kilogram mark in average milk yield per cow in an enterprise. Incidentally, 50 enterprises in the republic have already increased this indicator to 4,000 kilograms.

In the republic, the genetic potential of cattle today can fully support a high level of productivity. As a result of the purposeful breeding that has been carried out in recent years, three highly productive plant lines of the Latvian Brown breed were developed and approved. The cows of this line produce an average of 4,760-5,100 kilograms of milk, and record cows from this breed have produced 9,000-11,000 kilograms.

The goals of the next five-year plan for livestock raising require the extensive use of intensive methods for raising and fattening calves. At the present time on the average in the republic daily weight gain of feeder calves

fluctuates between 550-600 grams and live weight of the animals that are sold comprises an average of 413 kilograms. Our goal is to help enterprises raise these indicators to 800 grams and 500-600 kilograms respectively. Certain changes have occurred here. Already last year 15 of the republic's enterprises were able to surpass an average daily weight gain of 1,000 grams. But even this is not the outer limit. Good genetic potential as regards the fattening the Latvian Brown breed means that animals of this breed are capable of achieving a weight gain of even 1,300-1,400 grams.

Hogbreeding is an important branch of livestock raising. The average daily increase in live weight of feeder hogs (over the age of 2 months) still fluctuates around 400 grams. This indicator can be increased to 550 grams. Last year eight enterprises in the republic achieved this, and in stations for control feeding of hogs workers were able to achieve stable average daily weight gains of 720-730 grams in hogs of the Latvian White breed. Moreover, the more productive animals of this breed yielded 1,160 grams per day. This attests to the importance of intensive use of the genetic potential that has been developed in hogbreeding within the republic.

I will not discuss in detail the problems related to the further development of poultry raising and sheep farming, in which intensification of every link in the technological process is also essential. A comprehensive approach to dealing with this task lies in the program developed by our institute's specialists, called Seleks, which indicates promising ways of organizing breeding work in livestock raising on the basis of the latest achievements in national and international science. Scientists have already been successful in decreasing the standard expenditure of feeds per kilogram of milk and per unit of weight gain in hogs and cattle. Everything that has been done in this direction inspires optimism and confidence in the fact that the economic effectiveness of research being conducted by the institute in the area of animal genetics will continue to increase steadfastly.

Nevertheless, the tasks involving the country's accelerated socio-economic development, which were brought forth at the April 1985 Plenum of the CPSU Central Committee, urgently dictate the necessity of establishing closer ties between science and its achievements and concrete practical work in each enterprise, especially as concerns the strengthening of the feed base.

When do we have the smallest milk yields and weight gains in animals? Most frequently this happens when the energy level for feeding animals during the stall-upkeep period is violated. An analysis of data for the last 14 years shows that often animals are supplied with easily digestible protein 71-84 percent of the time. As a result, we have an overconsumption of feed and underproduction in terms of milk yield and weight gain. The food ration for animals must not only be varied but also strictly balanced on a scientific basis as concerns the content of vitamins, amino acids, mineral salts and other nutritional elements.

This task is not as simple by far as it first appears. Here we need comprehensive, coordinated measures for the workers of fields and farms. To a large extent a solution to this problem today is being facilitated by the use in the republic of a "soil--harvest" system, which was developed in the

Latvian NII [Scientific Research Institute] of Farming and Agricultural Economics, and by the work of scientists of LSKhA [Latvian Agricultural Academy] on the Korma ASU [Automated System of Agrochemical Service]. Our specialists also intend to actively participate in research on the further development of the Korma system. Its purpose is to determine optimal ration variants for animals under concrete circumstances for every enterprise on the basis of the widespread use of computers.

Scientific-technical progress in livestock raising depends to a large extent not only on the efforts of scientists working in this area of agriculture but also on an energetic approach to dealing with the problems of introducing innovations on the part of RAPO's [Rayon Agro-Industrial Associations] and directors and specialists of enterprises themselves. The times demand that ties between science and production be closer today.

Unfortunately, this is often interfered with by interdepartmental discreteness. Let me cite the following example. The Karusel UDA-100 milking apparatus, which was developed by Latvian specialists, has been operating dependably for the last 8 years in Yudashi Dairy Complex of our Sigulda Scientific-Research Enterprise. In recent years milk yield per cow has comprised over 4,500 kilograms and this year it has reached 5,009 kilograms. Mechanization curtailed direct labor expenditures to 1.5 man-hours per quintal of milk (using the Karusel apparatus one operator milks up to 1,000 tons of milk per year). As of yet this productive equipment has not been utilized on a mass scale because an agreement has still not been reached about serial industrial production of the new milking apparatus.

An important place in the activity of the institute's collective is occupied by further improvements in the system of veterinary-preventative measures. One of the main directions here is the course taken by specialists to utilize chemical and biological preparations in aerosol form as well as in other forms which enable workers to carry out preventative treatment for various animal diseases with minimal labor expenditures. Normative-technical documentation has already been elaborated for 57 medicinal preparations developed in our Sigfarm experimental-production laboratory. With these preparations the laboratory fulfills not only the needs of the republic but in part those of the country's veterinary service as well. A whole series of preparations developed here is in no way inferior to samples produced abroad.

As we know, the Latvian SSR Academy of Sciences coordinates the Science division in implementing the republic's Food Program. This is why today scientists from academic institutes such as those for microbiology, organic synthesis, biology, wood chemistry and non-organic chemistry are participating in the work to deal with many urgent problems of the branch of livestock raising. The scale of our partnership with fundamental and applied academic science is increasing and growing stronger. We hope that in the near future the potential of science, capable of dealing with urgent problems in livestock raising, will be utilized still more fully by means of assimilating not only the efforts of scientists themselves but also of innovative and creative specialists in enterprises. This is the goal of the efforts of our collective and its plans, which are directed at the successful fulfillment of the tasks of the 12th Five-Year Plan.

LIVESTOCK

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NEED TO IMPROVE CATTLE BREEDING TECHNOLOGY

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[Article by N. G. Dmitriyev, academician, VASKhnIL [All Union Academy of Agricultural Sciences imeni V. I. Lenin], Yu. V. Boykov, candidate of agricultural sciences, N. Z. Basovskiy, professor, Zh. G. Loginov, candidate of agricultural sciences, P. N. Prokhorenko, doctor of agricultural sciences, VNIIRGZh [Possibly: VNII for Breeding and Genetics in Animal Husbandry]

[Text] The intensification of animal husbandry involves improvements in the efficiency of breeding work on the accelerated improvement of livestock productivity and technical suitability. The extensive introduction, over the past 10-15 years, of evaluating bulls by the quality of their offspring and of the long term storage of deep frozen sperm has sharply changed breeding work in the majority of dairy cattle breeding zones. The evaluation of bulls, their selection [otbor] and the intensive use of sires have become the main method of breeding work. Over a 2-3 year period the majority of breeding enterprises obtain 20,000-30,000 doses of sperm from each sire and up to 100,000 and more doses from the most valuable bulls.

At the Central Station for Artificial Insemination in Moscow Oblast, over a several year period 274,200 doses were obtained from the bull Mayor MChP-1975 and 169,200 from Master MChP-1848. These sires had a positive influence upon increasing the dairy productivity of cherno-pestryy cattle. Their sperm has been used to inseminate hundreds of thousands of cows in Moscow and other oblasts.

Sperm from a number of valuable bulls has been used to inseminate 100,000 and more cows on farms in Leningrad Oblast, the Lithuanian and Estonian SSRs and other oblasts and republics. In recent years in the LiSSR 61 bulls have produced an average of 75,000 doses each, about 90 percent of the cows are inseminated by sperm from proven bulls and about 10 percent of the dams by sperm from approved sires. The extensive use of bulls requires improvements in some of the traditional methods of breeding work, first of all the systems of breeding by lines.



The discussions on the role of lines in breed improvement which were begun in ZHIVOTNOVODSTVO are of great significance in this regard. In this article we will attempt to give our views on various aspects of this problem and to link them to the general system of breeding operations.

Cattle of individual strains are now bred mainly within the limits of oblasts or republics not having oblasts. Breeding by lines, rotational choice [podbór] at users' herds, evaluation and selection [otbor] of bulls, etc is done under the leadership of the oblast (republic) breeding associations.

This method of breeding dairy cattle has led to a situation where there are at least 15-20 lines at farms within a given oblast. This is because the majority of bulls at artificial insemination stations are obtained from crossing lines, reducing their breeding value and frequently leading to inbreeding in commercial herds, with all the negative consequences. Research conducted at VIZh in Moscow Oblast and VNIIRGZh in Leningrad Oblast has established that these shortcomings become more clearly manifested when a limited number of sires are intensively used.

Therefore, in order to improve the efficiency of large scale selection of dairy breeds it is necessary, on the one hand, to improve the genealogical structure and system of breeding by lines, and, on the other, to create interoblast zonal centers for breeding work and artificial insemination in order to intensively use improvement sires and completely use breeding resources.

Based upon the development prospects for breeding work, in this article we give our point of view on the genealogical structure of strains and breeding by lines.

The structure of contemporary zavod [enterprise] breeds can, conditionally, represent a multicomponent coordinate [sopodchinenniy] system with direct and reverse ties. Conversely, the genealogical structure can be represented as a branching tree: breed [porodnaya] group, intrabreed (zonal) type, zavod type, line (genealogical and zavod), and family.

The genealogical structure of breeds is characterized by close mutual linkages among its elements, as the small units are component parts of its larger ones. However, their significance is not determined by their size: in some cases the numerically smallest structural units can have greater selection significance than larger ones. In analyzing the structural units of breeds we use the rules on the approval [aprobatsiya] of selection achievements (M. 1976), according to which the largest structural unit of a breed is the intrabreed (zonal) type. In addition to properties common to a given breed, intrabreed types have their own specific features (qualitative and quantitative indicators of productivity, body structure and constitution, adaptability to the breeding zone, resistance to disease and unfavorable environmental conditions, etc). One can put an equals sign between intrabreed and zonal types. Obtaining zonal types of cattle involves large differences in ecological-economic and geographic conditions of their breeding in various regions.



One can assume that the zonal type as a selection unit increases the genetic diversity of a breed and will be of great importance. We plan to improve the cherno-pestry breed through the use of Holsteins, creating 12 new zonal types. Contemporary concepts of selection theory argue that the greatest effect from breeding work with any breed is attained when the best world genotypes of a breed are used. American selections of Holstein's are a vivid example of this. Given optimal feeding and living conditions their milk yields exceed that of other cherno-pestry breeds by 500 kg and more.

Intrabreed types, created as a result of introductory [vvodnyy] or zavod crossing with cattle of better nonrelated breeds or of the same genealogical root, similar in productivity, color and body type are acquiring greater economic significance. This structural unit will distinguish such cows from those in the maternal breed not only with regard to dairy productivity, but by body type.

The discussions of the zavod type in the approval rules for selection in animal husbandry are factually unrealistic. The creation of a zavod type in this manner requires the closed breeding of cattle at a breeding farm [plemkhoz] or in part of the herd over 5-6 generations. That is, the zavod would have to go 25-30 years without using the best genetic material obtained outside the farm and would lag behind genetic progress at other plemkhoz using better material in the breed.

At present the majority of plemzavods [breeding enterprises] not only use the same bulls, but also exchange cows, lead selection in one direction, under approximately the same technological conditions, and are, on the whole, managed by the same specialists. Therefore, the advisability of creating zavod types in the classical sense becomes problematic. Zootechny uses the concepts of "zavod line" and "zavod type". However, these words have a different meaning.

A line is a homogenous group of related animals distinguished from others individuals in the same breed by definite characteristics. Animal husbandry distinguishes between genealogical and zavod lines. A genealogical line is a group of livestock descended from the same ancestor (not taking into account productivity and breed value), while a zavod line is a uniform qualitatively unique, group of highly productive pedigree [plemenny] animals, created and maintained in a number of generations by selection [otbor and podbor] descended from an outstanding ancestor and similar to it with regard to body type and productivity.

This definition supports the line as a selection unit. In this regard it should be recalled that the selection structure of a breed is a pyramid, at the top of which is the pedigreed [plemenaya] part of the breed and at the bottom the commercial. Pedigreed cows account for 0.5 to 10 percent of the total number in a breed (in some regions up to 20-25 percent). The pedigreed and commercial parts of a breed are dynamic categories, constantly "feeding" one another. Thus, if selection units can combine a number of genealogical structural units of a breed, then zavod lines lie within the framework of genealogical lines.

We think that even today lines have not lost their selection significance, but that priority is to be given to their great importance as a structural genealogical unit for a breed. We adhere to D. A. Kislovskiy's opinion which sees the essence of lines and breeding by lines as the differentiation of breeds into diverse groups, the creation of their structure and improved material, based upon what has been attained. Genealogical lines make possible the effective use of outstanding bulls or so-called breed leaders.

In the opinion of A. P. Beguchev, M. D. Dedov and others (1983) breeding for lines creates substantial difficulties for the widespread use of improvement sires and does not prevent random inbreeding at commercial farms. These authors are incorrect, as it is not the system itself which is guilty, but the lack of a clearly substantiated system of breeding by lines and the presence of numerous small zavod crossed lines.

We will dwell on another argument these authors advance against breeding by lines. They note that the system proposed by M. M. Lebedev and A. A. Lyapustin (intra-line selection in breeding sires) requires a long time for implementation and makes it possible to select a test animal [proband] for continuing the line only 15-20 years after the breed progenitor [rodonachalnik] is evaluated for offspring quality. This would be so only if the new zavod line were created without taking into account preceding work of selectors and the breed's genealogical structure.

In practice, a new line is formed gradually within an old zavod or genealogical line. For objectivity's sake, it should be said that the majority of lines met in the specialized literature are delineated and described mainly using data on animals which died long ago, that is, during the life of the line's progenitor there was, as a rule, no active selection unit. Consequently, until the necessary conditions for a new line are created, it can only be continued with the help of intra-line selection without violating the genesis of breeding herds and line rotation and without stretching out the evaluation of offspring (to reveal those continuing the line) over 15-20 years. After determining the progenitor of a new line, for at least the first two generations of inbreeding, the main animals used are not this progenitor, but his outstanding predecessors (selection [podbor] within the "old" line).

It is fitting here to mention the naming of lines. In the USSR lines are named according to the names of the progenitor. In a number of foreign countries line names also include the geographic site of line formation and sometimes the name of the line recorder, etc.

We propose that three names [klichki] be mentioned in line naming: the progenitor (first place), his father (second) and mother (third). The expediency of this can be demonstrated, but we will only direct attention to the fact that in the future mothers of outstanding bulls will be donor cows, during the lives of which one will be able to obtain 25-50 bulls and as many heifers.

The assertion that breeding by lines requires a large number of approved bulls is to some degree correct only if there is an unjustifiably large number of lines. The decisive factors determining the number of bulls necessary for

testing by offspring are the intensity of their selection [otbor] and the presence of paired stock [sluchnoye pogolovye] in commercial herds inseminated by improvement sires.

However, it is necessary to refine a number of factors in breeding by lines. The existing definitions of lines state their need to be qualitatively unique and that offspring resemble progenitors.

In our opinion, these requirements are not now so necessary, for the industrial technology of dairy animal husbandry requires standardized animals. Moreover, the search for successful combinations of lines and types in dairy animal husbandry is problematic and has no practical significance.

Research in recent years on groups of cows and polymorphic systems has shown the possibility of using one or the other for marking lines.

The study of zavod and related groups shows that they often do not have any specific productivity or exterior features, as their selection methods are identical, but they are distinguished by genetic differentiation. This should also be expressed in the similarity of animal lines to the progenitor because the line progresses only if the breeding value of each subsequent generation exceeds that of its predecessor. Given the precise organization of bull selection [otbor], raising, evaluation and use, this task is completely realistic. For example, Ayrshire bulls in Finland evaluated in 1980 for the dairy productivity of their daughters, considerably exceeded bulls evaluated in 1976. The difference in yields of 4 percent butterfat milk was 411 kg. The points mentioned above also show that there are considerable reductions in the breeding value of bulls after prolonged use. Thus, for 24 sires used to improve yields, in 1976 their relative index for breeding value in this area was 1.69, while by 1980 it had declined to 1.37. About 25 percent of these animals were transferred to the deteriorator [ukhudshatel] category. During this same period the index of improvement sires for 4 percent milk declined from 1.70 to 1.13. The influence of a genetic trend on changes in breeding value can be vividly shown using by the evaluation of the cherno-pestryy bull, Keympe LChP-673. This sire was evaluated at 57 sovkhoses in Leningrad Oblast for the productivity of 2,515 daughters (1975-1983). In the first 2 years they exceeded milk yields of other animals of equal age by 200 kg, after 5 years by 101 kg and after 9 years by 73 kg.

Using this example, we would like to direct attention to the need to try not only to simply repeat the genotype of the progenitor, but to obtain bulls with higher breeding values. This is, above all, through strict selection [otbor] and the intensive use of sires. For example, in the United States, the Holstein bull Elevation 1491007, whose breeding value (50,900 daughters) was +1,404 pounds of milk, produced 2,368 sons with an average breeding value amounting to + 679 pounds of milk.

Unfortunately, at farms in our country the intensity of bull selection [otbor] remains low. For example, 458 of the better cherno-pestryy bulls widely used in various zones were obtained from 193 fathers over the past 10 years. The very low intensity of sire selection [otbor] has a negative effect upon their breeding value and the rates of genetic improvement in commercial herds. The

modeling and optimization of the selection program for dairy cattle shows the pace of genetic improvement can be increased 2-3 fold if there is a sharp increase in the intensity with which fathers of replacement animals are selected and improvement animals used. For example, with purebred breeding of Kholmogor cattle, the annual selection effect can be increased from 18 to 35-40 kg of milk if the number of sires used at breeding enterprises to artificially inseminate cows is decreased to one-third and the intensity of selecting fathers of replacement bulls is increased by 10 fold. Similar data have been obtained for other breeds.

It seems to us that if one examines the breeding [razvedeniye] of strains by line and the breeding [vyvedeniye] of new lines as a means of differentiation and the creation of consolidated valuable breeding material, with the appropriate means of selection [otbor], [podbor] and with systematic biochemical control over its effects, then a line can exist for a long time.

Theoretical studies, selection-genetic calculations and the work experience of breeders in our and other countries are evidence that dairy breeds must be divided into a limited number of genealogical groups. The time has come to take an inventory of all lines, establish their ties and to combine the large genetic similarities and relationships into several large lines with branching structures.

We think that 2-4 is the optimal number of such lines for local breeds and for widespread breeds, but for the latter it should be within the limits of each zonal type.

An analysis of the dependence of lines' genetic progress upon the number of breed cows shows that where there are not more than 500-600 animals, the annual genetic progress is 33 percent less than for lines with 2,000-2,500 dams and 85 percent less than lines with 5,000-6,000 dams. Thus, the herd [sluchniy pogolovye] of Ayrshires in the Yuttero Romeo 15710 line consists of 5,799 animals in breeding herds with a 36 kilogram expected annual genetic trend for yields. The line of Khannulan Yayuskyari 23000 has 565 dams and a genetic trend of 20.4 kg. When using two fathers for inbreeding, the annual yield depression in the first line is 1.6 kg, while for the second it is 2.1 kg, and the increase in inbreeding is 0.28 and 0.37 percent.

In accordance with the existing statute on the approbation of selection achievements in animal husbandry, a line can be approved as a zavod line if it has 10 improvement bulls and 500 cows. This requirement does not determine the structure of a line. Many situations can arise where a formally approbated group can be considered a line, but not be capable of developing further with the help of intraline selection [podbor]. For example, a line has 2 branches through 2 sons, 2 grandsons and 10 great-grandsons of the progenitor in each branch. Such a line meets the rules' requirements for approbation, but its structure does not make it possible to use intraline selection more than once in a generation without using inbreeding less than degrees III-II.

Calculations show if bulls are obtained primarily by the intraline selection method and if breeding farms raise cattle by lines, then each line must have no less than 4 branches.



The use of one bull to continue a line leads to extreme inbreeding. Thus, if one father is selected each year, then, if there are two branches in the line, the great-grandson in a line will be inbred to degrees III-II in two bulls, to degrees IV-III and III-II, and with 3 branches, to degrees V-III and IV-II respectively.

Breeding by lines can be successful only if there is a highly organized and high quality breeding base. In our opinion, the time has come to have only one category of breeding farm -- breeding enterprises [plemzavody]. Research on optimizing the size and structure of breeding herds shows that increasing the number of cows combined by a single selection program to 3,000-5,000 improves the selection effect by an average of 20 to 40-50 kg of milk annually per cow in the breeding herds and in the entire breed.

First of all, it is necessary to certify [attestovat] all breeding and commercial herds having highly productive animals. The better commercial farms should become plemzavody, while the poorer breeding farms should become daughter farms to plemzavody or commercial herds. Before beginning this work it is necessary to amend the statute on plemzavody. Increased requirements should be made upon the productivity and breeding qualities of livestock, upon the young animals sold and upon all zootechnical work. In particular, at plemzavody, cow productivity should at least meet elite class requirements: for dairy breeds no less than 4,500 kg, for dual-purpose breeds -- 4,000 kg of milk.

In conclusion we propose giving authors certificates and material awards not so much for the breeding of new lines as for obtaining outstanding sires and recorders [rekorditskil], for genetic progress in a given line, breeding herd, population or type.

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AGRO-ECONOMICS AND ORGANIZATION

IZVESTIYA SERIES WRAP-UP ON AGROPROM CONSIDERS RAPO FUTURE

Moscow IZVESTIYA in Russian 5 Sep 85 p 2

[Article by G. Gukasov and O. Pavlov, IZVESTIYA special correspondents: "Tale Of Agroprom: Chapter 6. The House Needs a Roof." This is the sixth and final article in the feature series "Tale of Agroprom" published by IZVESTIYA during 31 August-5 September 1985 on the subject of Agroprom, the Estonian regional agroindustrial complex. The series begins with a commentary on the play "Responsibility," presented in Parnu, Estonia and written by Walter Ulam, first secretary of the Parnu Rayon Party Committee. References to the play are made throughout the series.]

[Text] Carl, the chairman of the rayon executive committee, from the play "Responsibility":

An economic experiment usually has as its goal the examination of new theoretical elaborations and systems of management, finance and supply, and material incentives. The experiment can continue for a long period of time, but not forever. Sometimes the "experimenters" persistently strive for especially favorable conditions and demand greater and greater resources, limits and other incentives for their "initiative" while providing little in return. Well-organized experiments yield real results.

In Estonia and Georgia the construction of the Agroprom building has basically been completed. In the northern republic a republic association was created, in the southern--a state committee which joined together the main agricultural production branches--the agricultural ministry, Selkhoztekhnika [Agricultural Equipment Association] and the ministry of land reclamation and water management. The remaining eight departments of the agroindustrial complex enjoy the rights of council members and have a consultative voice. (Just as the Agroprom apparatus has the right of persuasion in regard to them). Among these eight departments are the ministry of procurement, the ministry of the meat and dairy industry, the ministry of the food industry and for some reason also the interkolkhoz building association.

Despite this, Agroprom has achieved a considerable amount. Thanks to this, the structural subdivisions of apparatuses of former ministries and

departments have been decreased almost by half. Planning has improved. The RAPO [Rayon Agroindustrial Association] is distributing material-technical and financial resources in a more qualified manner. During the 2 years that Agroprom has been in existence in Estonia gross agricultural production increased by over 11 percent as compared to the preceding 2 years, the sale of grain increased by 8 percent and of meat and milk--by 12.5 percent.

"But what do we see as especially important?" says Kheyno Veldi, chairman of the council of the republic association. "Agroprom, which was created on the basis of scientific elaborations, continues to set the pace of scientific-technical progress within the agroindustrial complex even now. I could tell you a great deal about how we organized seed farming and how we are managing work with the herd in order to surpass the limit of 4,000 kilograms of milk yield in the near future. During the last 2 years the republic has achieved the highest level in the country as regards the production and procurement of field and farm products per worker. Science helps us in real terms in practice, but most importantly--with ideas. Even now we are on the threshold of new decisions."

You must understand that that which has been achieved by us can be called the result of integration of organization and management within the APK [Agroindustrial complex]. But this is only the first level, and even it has not been completely uncovered. Agroprom must have not only administrative rights but economic leverage in plan regulation as well. Scientists feel that the necessary resources for economic influence must be available within the framework of the republic's Agroprom (this is possible on an oblast level as well).

Here is what we have in mind.

First of all there must be a concentration of Agroprom's efforts and resources on the acceleration of scientific-technical progress. This will enable us to more rapidly create and introduce new technologies into the production, storage and processing of agricultural products. Resources that are now dispersed among different departments often are not effective. By unifying them Agroprom will be able to organize interbranch scientific-engineering centers and to form mobile groups of developers and workers specializing in introducing systems for the purpose of solving operations problems.

Secondly, procurement prices must be regulated. Estonia has been known for its herds of cows and its skilfull fattening of young bulls for a long time. A certain crop and feed structure and the historical experience of agriculture "work" for these herds. But current procurement prices make hogbreeding a more advantageous branch. Profits from it are good, but fattening is carried out basically using purchased forage. And enterprises depend on those who allocate the forage.

In practical terms it is impossible to establish optimal prices for every type of product in every region from the center, from Moscow. Also, this is hardly necessary. Estonia's Agroprom is satisfied with the general level of current prices. It is important to have the opportunity to correct them from within the republic. For example, we would like to lower the prices somewhat for

pork and to raise them for milk and beef. Agroprom would also like to regulate prices for several types of resources such as those that come from outside the republic, especially mixed feeds and mineral fertilizers. Here an increase in the price could be introduced--this would rouse enterprises to demonstrate more concern for their own feed base and for organic fertilizers. The increases could be used by Agroprom to equalize the level of management by helping those kolkhozes and sovkhozes which find themselves in objectively inferior conditions.

These are just two proposals made by the republic's scientists and by Agroprom directors and specialists. There are many more such proposals.

Agroprom has been crushed under the weight of documentation. USSR MinSelkhoz [Ministry of Agriculture], Goskomselkhoztekhnika [State Committee of the Agricultural Equipment Association], Minvodkhoz [Ministry of Water Management] and Soyuzselkhozkhimiya [All-Union Agricultural Chemical Association] all view Estonia's Agroprom as a small department that is subordinate to them. All of them require the presentation of plans and reports for their branch and send down a mass of documents for this purpose. Last year alone Agroprom received 1,684 orders, instructions and letters from Goskomselkhoztekhnika and 1,352 from MinSelkhoz. No fewer were received from Minvodkhoz and Soyuzselkhozkhimiya.

"In this type of situation," says Vello Soomets in Vilyanda, "it turns out that what we need is not scientists--agronomists and diploma engineers but chief clerks and competent typists. But all we have is one typist and one secretary-typist. The remaining 50 persons are senior and head specialists. The salary scale for specialists is lower as compared to the same category of workers in enterprises. For chief clerks the difference is great. But this is a state schedule and we can change nothing. It would appear that the money is our own--belonging to the kolhoz or sovkhoz--but we are not able to dispose of it as we see fit."

"What does the basic organization of Agroprom need?" asks Karl Genrikhovich Vayno, first secretary of the Central Committee of the Estonian CP. "State orders for the production and delivery of agricultural products into the union fund, corresponding material-technical resources and a stable wage fund with the right to have economic links decide for themselves what to pay whom for what services within the framework of this fund--just three indicators. The basic organization also wants full responsibility for supplying its region with food products. It is clear to us that Agroprom will be able to operate without disruption as soon as measures are implemented to enable it to manage, plan and finance as a single unit."

In rayons one frequently hears discussions about how the work of Agroprom is to be evaluated. In general the criteria are clear, involving the production of products needed by society with minimal expenditures. Until recently plan fulfillment and above-plan sales of products to the state were rewarded within agriculture. An orientation toward only these indicators creates its own problems. We know that with a relatively high level of production continued growth requires great efforts and investments. The opportunities to receive supplements to procurement prices decrease. It turns out that the average



sales price for products is lower with a high level of production than with a lower level. Evidently, a more flexible system is needed to provide incentives for effective use of an enterprise's resource potential. There are many problems here.

In the old days in Russia people who built cities and fortifications, bridges and dams, were called rozmysls [Translation unknown]. It was their direct responsibility to think through a problem from all angles, basing their judgement not only on their own calculations, intelligence and native wit but also on the experience that was accumulated by previous generations. There was a tradition that the bridge builder, for example, would stand under the bridge span when the first train travelled over the bridge.

The first train has travelled over the bridge called Agroprom and standing under the span were Valter Udam, Guram Mgeladze and Mikhail Bronshteyn. They stood there without fear because they knew that the bridge was built with a firm foundation. It is no accident that they and several other scientists and practical workers have been nominated for the State Prize for the development, experimental working through and introduction of organizational bases and economic mechanisms of rayon agroindustrial associations.

We have discussed the interesting and, in our opinion, educational, experience of the foundation and development of Agroprom. We hope that an acquaintance with it and with the directions of research that is still being carried out by innovators will help to solve many problems standing before workers of the RAPO and of other organs, will help them to conceptualize their own practical experience, to see their possibilities better in terms of improving the economic mechanism within management and to demonstrate more initiative and independence in achieving the goals that have been established for the country's agroindustrial complex. We feel that our readers--specialists, organizers, innovators in agriculture, scientists and practical workers--will continue the "Tale of Agroprom" and will share their thoughts and achievements, difficulties and prospects for growth as concerns the restructuring of APK management.

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## AGRO-ECONOMICS AND ORGANIZATION

### ESTONIAN AGROPROM EFFECTIVENESS DISCUSSED

Tallinn SOVETSKAYA ESTONIYA in Russian No 4, Apr 85 p 4

[Text] The Presidium of the Council of Ministers of the ESSR met to examine the results of financial-economic activity of the republic's Agroprom for 1984. Production and state purchases of agricultural produce increased during the past year. In comparison with 1983, the volume of gross agricultural output increased by 20.6 million rubles. Agro-technical enterprises and organizations met the plan's goals in the sale of goods and services. The net profit of the kolkhozes and sovkhoses rose by 10 percent. The plan for building housing and social-public facilities was exceeded.

At the same time, there are a number of shortcomings in the work of the Agroprom EESR and in the rayon agro-industrial unions, farms, enterprises, and organizations of the system. Areas planted with grain, potatoes, vegetables, and industrial crops were reduced. Kolhozes and sovkhoses did not meet their goals for the sale to the state of linen fibre, fruits, and berries. The cattle population in eight rayons and the swine population in ten rayons decreased in comparison with the preceding year. Expenditures in basic production increased and the prices of agricultural produce rose.

The Estonian Agroprom has been charged with eliminating these deficiencies and with improving the planning and economic mechanisms to ensure that the kolkhozes, sovkhoses, and enterprises are provided with the same means of expanding reproduction and material stimulation of the workers, with accelerating the introduction of scientific and technical achievements, with stepping up work on raising production and procurement of fodder.

In the discussion of the effectiveness of scientific research and experimental-design work being done to implement the food program, it was observed that the Estonian Agroprom, the Estonian Academy of Sciences, the Estonian Agricultural Academy, and the Tartu State University had achieved good results. New high-yielding varieties of agricultural crops have been grown and reproduced; biological pest control agents have been created; and a scientifically-based conveyor system of production and the procurement of grassy fodder, effective conservation methods and the siloing of feed have become customary.

However, the problems of raising the effectiveness of science and strengthening its ties with production, as well as the problems of accelerating

scientific-technical progress in the area of agriculture plant-growing are still being solved too slowly. The Estonian Agroprom has not ensured the introduction of the achievements of science and the latest experience in agricultural production. The biological potential created through the selection of varieties of agricultural crops, is not being fully utilized in the republic's agriculture. The level and results of scientific research on a number of important agricultural questions are not living up to the demands of the development of agriculture.

The Estonian Agroprom has been charged with taking additional measures to raise the effectiveness of scientific research and experimental-design work, raising the effectiveness of the Scientific-Technical Council in coordinating scientific research, and introducing the achievements of science and the latest experience into agricultural production.

Concrete problems in the areas of agriculture, agro-chemistry, selection, feed production, land reclamation, agricultural mechanization, fruit and vegetable production, pest control and biotechnics put to the scientific establishment.

A report on the work of the Ministry of the Fruit and Vegetable Industry on the procurement of vegetable crops was heard. Other issues were also discussed.

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AGRO-ECONOMICS AND ORGANIZATION

SIDORENKO ON ECONOMIC LINKS OF PRIVATE, PUBLIC SECTORS

Moscow SELSKAYA NOV in Russian No 9, Sep 85 pp 14-16

/Article by V. Sidorenko, Candidate of Economic Sciences and deputy chief of the Main Administration for Subsidiary Enterprises and Trades and Auxiliary and Private Plots of the USSR Ministry of Agriculture: "What Can the Rural Farmyards Provide?"

/Text/ They can provide a great deal. They can ensure that a family is supplied with high quality products. They can augment the country's food resources. They can divert one from participating in meaningless pastimes and drinking. And all of this can be realized providing one indispensable condition is met: close and mutually advantageous economic and organizational contacts must exist between the private plots and the public economy.

Our state, in achieving an increase in the production of agricultural products, particularly in the public sector, is also devoting a great amount of attention to the development of the private plots as a component part of the country's food complex. In the country's Food Program, emphasis is placed upon the fact that the most important task of the soviet and agricultural organs, the farm leaders and the trade union organizations is that of creating conditions which will ensure that each family residing in the rural areas will be able to have a private plot and maintain livestock and poultry. Large-scale economic and organizational measures have been outlined in the decrees handed down on this subject by the CPSU Central Committee and the USSR Council of Ministers. Normative documents have been issued which regulate the relationships of kolkhozes, sovkhoses and the population in the production and procurements of agricultural products on a contractual basis. The role and place of the private plots are set forth in the USSR Constitution, the Kolkhoz Regulation and also in the Principles of Land Legislation.

All of this makes it possible not only to improve the food supply for the population but also to solve the important socio-economic problems of the rural areas. It bears mentioning that the resources of the LPKh /private plots/ are quite considerable. Computations reveal that if the livestock, poultry and milk being procured annually from citizens on the basis of contracts were to be produced at kolkhozes and sovkhoses, approximately 230,000 additional workers



would be required and hundreds of millions of rubles worth of capital investments would have to be spent for the construction and equipping of livestock facilities.

The 8 January 1981 decree of the CPSU Central Committee and USSR Council of Ministers entitled "Additional Measures for Increasing the Production of Agricultural Products on the Private Plots of Citizens" has played an important role in the development of the LPKh's. First of all, the economic interest of kolkhozes and sovkhoses in the affairs of rural farmyards has been raised. As is known, the livestock, poultry and milk being purchased on a contractual basis from citizens are now being credited to the kolkhozes and sovkhoses towards their production volume and towards fulfillment of the state plan for the sale of agricultural products. As a result, many farms are obtaining bonuses added on to their prices -- and many of them -- for their quantitative and qualitative indicators. For example, in 1983 the kolkhozes and sovkhoses of USSR Minselkhoz /Ministry of Agriculture/, as a result of livestock, poultry and milk purchases on a contractual basis from the private plots of citizens and their subsequent sale to the state over and above the average level achieved during the 10th Five-Year Plan, received more than 1 billion additional rubles in the form of bonuses added on to the prices for these products.

And indeed, earlier the kolkhozes and sovkhoses were ordered to provide assistance to the LPKh's. However, the effectiveness of such instructions was not very high: the farm leaders did not see any economic advantage in this. When they became convinced that the LPKh's could provide great assistance to public production, their attitude towards them changed abruptly.

Time and experience have fully confirmed the correctness of the policy being followed by the party and government with regard to achieving cooperation between the public and private economies in the work concerned with increasing the production of goods based upon mutual collaboration.

Notwithstanding the unfavorable weather conditions, an increase took place in gross agricultural output during the 11th Five-Year Plan compared to the 10th. Increases were recorded in the production of meat, milk, eggs and wool. The kolkhoz and sovkhos economies became stronger.

Nor did the private plots stand idle in place. Over the past 4 years, the average annual gross output volume by the LPKh's increased by 6 percent compared to the corresponding period for the previous five-year plan. More livestock appeared in the rural farmyards. If we use 1980 as the reference point, then in 1984 the number of cattle on LPKh's increased by 4 percent, including cows -- by 0.8, hogs -- by 0.7 and sheep and goats -- by 6.9 percent. Perhaps these figures are still not too impressive and yet the revival of private livestock husbandry, following an extended period in which the LPKh's were not regarded very highly and the number of animals found on them decreased sharply, is considered to be very gratifying.

Beyond any doubt, the diverse types of assistance which the rural farmyards are receiving from the kolkhozes and sovkhoses are having an effect here. The following indicator is worthy of note: last year the sale of young pigs and

the citizen owners of the LPKh's, whereas profit obtained in public production is the property of all of the people and is distributed in the interests of society. I wish to be understood correctly: work performed on an LPKh is socially necessary and yet the economic mechanism for redistributing the results of work performed in the public sector is completely different from that for the private economy.

Thus, by no means are we indifferent to the type of participation by a citizen in the affairs of a kolkhoz or sovkhaz. In furnishing assistance to the private economy, we must not operate on the basis of "the same earrings for all sisters." Here a preference should be shown for those who are performing better and more conscientiously in public production. Unfortunately, this important condition is not always being taken into account by the local farm organs or by the kolkhoz and sovkhaz leaders.

In some areas the adopted decrees and other normative documents are interpreted to mean that the kolkhozes and sovkhazes must provide the LPKh's with feed, construction materials, technical equipment, young animals and other services free of charge. This is completely wrong. The assistance for citizens engaged in maintaining private plots must be provided for a definite payment and only in some instances, as called for in the normative documents -- using kolkhoz or sovkhaz resources.

What are these instances? Sovkhazes and other enterprises are authorized, by agreement with the trade union committees, to liquidate by means of the economic funds for stimulation up to 50 percent of the credit extended for acquiring cows and heifers to workers and employees who work conscientiously at these enterprises, to teachers and doctors who work and reside on the territory of these enterprises and also to pensioners who worked for an extended period of time at the enterprises in question.

Or permit me to cite the following example. For the purpose of raising the interest of young families in creating private plots, the kolkhozes, sovkhazes and other state agricultural enterprises can provide them with young livestock free of charge and furnish assistance in the construction of outbuildings, upon the condition that the members of these families work at the enterprises in question.

Unfortunately, in the press and at various types of conferences, one reads or hears statements which interpret erroneously the relationships between the private plots and public farms. One does not have to look far to find an example. For example, the authors of the brochure entitled "Private Plots," published in 1982 by the Uzbekistan Publishing House, state that the LPKh's represent a "special type of farm and one which ensures a prosperous life for citizens." Is it necessary to prove that this is completely wrong, since a prosperous life for Soviet people and their material welfare are ensured mainly by work performed in public production. The private plots play only a subsidiary or auxiliary role.

A considerable amount of positive experience has been accumulated throughout the country in organizing equal economic relationships between the public farms and private plots. Moreover, these relationships may take various forms depending upon the local conditions.

For example, in those regions (Latvia, Lithuania, Estonia, Belorussia and others), where the requirements for meat and milk are met mainly on the basis of deliveries from state resources and also by means of various internal sources, the purchasing of meat and milk from the population is carried out chiefly on the basis of contracts with the kolkhozes and sovkhoses. In this instance the products purchased from citizens are added to the state resources and the kolkhozes and sovkhoses receive the monetary bonuses called for by law. In this manner, the economies of the kolkhozes and sovkhoses are strengthened.

The situation is different in Omsk, Kuybyshev and other oblasts. Here, emphasis is placed upon leaving the meat and milk purchased from the population in the local resources and a preference is shown for consumer cooperation, which purchases the meat and milk from the population and sells them in the stores of the commission trade.

At the same time, there are basic statutes the observance of which, in the interrelationships with LPKh's, are mandatory for all of the local organs and kolkhozes and sovkhoses without exception.

Such rules, which must be followed by everyone in all areas, include: a uniform price system for products purchased from the population and also for feed, construction materials and other services made available to citizens; observance of the norms for the maintenance of private livestock and for the dimensions of the private plots; conscientious work by the owners of private plots at kolkhozes, sovkhoses, enterprises and institutes.

Unfortunately, these important conditions are not being observed in some areas and this is causing considerable harm to the overall task.

Recently, I happened to become acquainted in detail with the work of the Transcarpathian Oblast experimental station. It bears mentioning that SELSKAYA NOV has made reference in its publications to the "experiment" carried out here (I intentionally placed this word in quotes -- V.S.) and it is believed that this was done in vain. It hardly needs popularizing.

I must admit that I was startled by the 9 February 1983 order by the station's director entitled "On the Purchasing Of and Contracting For Young Cattle Stock From Farm Workers and Employees," in which serious deviations from the normative documents were tolerated. In particular, the order unjustifiably authorized those citizens engaged in fattening cattle on a contractual basis, the payment for which is carried out at state purchase prices, to be credited with man-days and wages at the rate of 6 man-days and 30 rubles per quintal of increase in live bulk. In addition, the citizens are to be paid a portion of the bonuses added on to the prices for heavy-weight cattle raised on private plots and sold to the experimental station on a contractual basis. Moreover, these illegal "injections" are taken into account when computing disablement allowances, vacation pay and pension amounts.

Transport services are provided for the private plots of citizens at the expense of the experimental station.

As you can see, the station's director performs in the role of a kind uncle, illegally stimulating private livestock husbandry at the expense of the state.

And at the same time, he restricts it in a completely illegal manner. Point 9 of the mentioned order reads: "All citizens residing on the territory of the farm are warned that for the sale of young stock beyond the boundaries of the farm they will be deprived of the right to graze their private livestock on pastures, canals or roadside strips (drainage ditches)." Such a condition! To raise a young bull from the beginning for the station and subsequently to be permitted to graze one's cow not just anywhere, but "on canals or roadside strips." What kind of voluntariness is this, the need for which is emphasized in a party and governmental decree!

An agreement has been developed at the experimental station in which the "innovative" conditions of the order are reflected. Such agreements for the raising of livestock are concluded by the experimental station with those citizens who reside and work beyond its borders and this is in conflict with the established order. And one very disturbing fact -- the agreement is printed off in a large number of copies and is used not only at the experimental station but also on neighboring farms.

A check has revealed that the man-days for the fattening of cattle are credited as a rule to those workers whose output in the public economy is not adequate. For those who work conscientiously in public production, there is no need for such an addition. Moreover, the "bait" in the form of illegal bonuses for heavy-weight cattle, the crediting of work service and wages not earned in the public economy is by no means symbolic in nature. It "diverts" more than 100 rubles.

For example, citizen A.P. Kovach, who resides at the Druzhba Kolkhoz, last year undertook to raise on the basis of an agreement with the experimental station 10 young bulls, six of which he had already sold to the farm in accordance with the state purchase prices (192 rubles per quintal), with an additional payment being made to him in the form of a bonus added on to the prices for heavy-weight cattle (28.8 rubles) -- in all, 220.8 rubles per quintal of weight increase in the animals. The average daily weight increase during the raising period was 1,002 grams.

Simple computations reveal that over a year's time A.P. Kovach will realize a weight increase in the 10 young bulls of 36.6 quintals and he will be paid 8,100 rubles. But this is still not all. In accordance with the system established on the farm, he will be credited with 219 man-days and 1,098 rubles of wages. What is happening? Without participating directly in the work being carried out on the fields and farms, it is possible to obtain a decent service time and wage, on the basis of which a disability allowance, vacation pay and a pension amount can be computed.

Perhaps the management of the experimental station tolerated these disruptions out of lack of knowledge. By no means. Two letters were received in this regard signed by the deputy minister of agriculture for the UkSSR A.G. Denisenko, in which the illegality of such actions is pointed out quite clearly. However the station's management continues to have its own way under the pretext of carrying out the "experiment."

As is known, a bad example is contagious. Thus, with the tacit consent of the agricultural and financial organs, the administration of the Kolkhoz imeni



young poultry to the population increased by a factor of almost 1.9 compared to 1976.

This assistance is resulting in additional products. Thus, in 1983 the amount of milk and meat purchased from LPKh's, mainly on the basis of contracts with kolkhozes and sovkhoses and also through consumer cooperation, was greater by a factor of 1.4 than the amount obtained in 1980.

Contractual practice is gathering force with each passing year. Thus, more attention is being given to it and the positive experience in its use and also the mistakes tolerated are all being analyzed more closely. Today the task consists not only of purchasing surplus agricultural products from the population, products which over an extended period of time peasant families have not used for their own consumption but rather have sold. We presently have in mind the purchasing of milk and meat in volumes which a rural farmyard plans in advance to produce and sell in conformity with contracts concluded with kolkhozes, sovkhoses or organizations of consumer cooperation. This portion of output can and must be taken into account in the plans of farms and procurement organizations, a logistical base for timely purchases, processing and storage must be created in behalf of such output and the required resources must be made available. And if in some areas we are still encountering incidents wherein products covered by contracts are not being accepted from the population, then this signifies that the workers attached to these enterprises and organizations are not coping with the important work assigned to them. Nothing else, for example, will explain what happened last year in the Transcarpathian Oblast, when during the peak autumn months consumer cooperation was unable to accept on a timely basis all of the hogs offered for sale. As a result, approximately 12,000 animals that had been prepared for sale remained in the peasant farmyards. Such delays cost the oblasts dearly: at the beginning of this year and compared to last year, there was a sharp reduction in the number of hogs on the private plots of the population.

In speaking before the April (1985) Plenum of the CPSU Central Committee, Mikhail Sergeyevich Gorbachev emphasized: At times, one encounters attempts on the part of local organs to avoid all concern for supplying food goods and, in particular, ensuring the availability of feed. Such practice is unacceptable. The task consists of activating more completely all available reserves for increasing the production of food goods, both at kolkhozes and sovkhoses and also on the subsidiary farms of citizens and enterprises."

Experience has convincingly confirmed the correctness and the timeliness of the measures undertaken to increase the production of agricultural products on the LPKh's. One regularity has emerged quite clearly: the rural farmyards are receiving greater assistance in those areas where better work is being carried out in the public economy. Any disruptions in the existing system of economic and organizational relationships between the public and private farms immediately changes the nature of their collaboration.

In comparing these two sectors of the agrarian economy, it should be borne in mind that profit, which is a monetary form of surplus product, obtained in the private economy from the production of milk and meat and the sale of such products to kolkhozes and sovkhoses at state purchase prices, goes entirely to

Zhdanov in Volovetskiy Rayon handed down a decision calling for 25 man-days to be credited for each young bull weighing 400 kilograms that was raised on the basis of an agreement with the farm. Agreements are being employed in Volovetskiy, Irshavskiy, Beregovskiy and other rayons which, in terms of their content, do not conform to the standard agreements approved by Minselkhoz /Ministry of Agriculture/, Minfin /Ministry of Finances/, Minzag /Ministry of Procurements and the USSR TsSU /Central Statistical Administration/.

The local branches of USSR Gosbank, on a very tardy basis, are providing the oblast's kolkhozes and sovkhoses with short-term loans for the accounts being maintained with citizens for the cattle purchased from them. As a result, a great amount of indebtedness to the population has developed. At the beginning of 1985, the oblast's kolkhozes owed 972,000 rubles to citizens. Many of them are unable to obtain the money due them, money earned on the basis of difficult labor and in connection with the sale of cattle to kolkhozes and sovkhoses over a period of 10 or more months, despite the fact that in accordance with the standard agreements such accounts should be settled within the course of 10 days. This forces the people to address complaints to the various levels and it weakens their desire to maintain a private plot. It is by no means an accident that a decrease has taken place in the numbers of cattle, cows and hogs being maintained on private plots in the Transcarpathian Oblast.

The delays in the extension of short-term loans for managing the accounts with the population often result from the fact that the kolkhozes and sovkhoses do not provide the bank with the documentation required for obtaining loans in a timely manner and the agricultural organs are not exercising constant control over these matters.

Such a situation is particularly unacceptable in view of the fact that on many farms and in the agricultural organs in the Transcarpathian Oblast there are staff workers who specialize in private plot matters. It would seem that they should take care of this problem. However, it turns out that they devote only a limited amount of attention to the vital concerns and needs of the private plots. A comprehensive analysis is not being carried out with regard to the status of affairs in the production and procurements of agricultural products from the population, the problems, trends and bottlenecks in the development of the LPKh's are not being brought to light and recommendations are not being prepared for improving economic relationships between the public farms and private plots. The production-financial plans of kolkhozes and sovkhoses do not always call for measures aimed at ensuring that the private plots are supplied with feed, young cattle stock and other assistance and also purchasing the cattle from the population. The specialists attached to agricultural organs, kolkhozes and sovkhoses are not studying adequately the effective normative documents covering the production and procurements of agricultural products on private plots. The oblast's control-auditing service is not uncovering the serious shortcomings which exist in this work.

The mistakes and unfinished work noted in the Transcarpathian Oblast are also to be found in other areas. Generally speaking, the rural farmyard picture is a complicated one. This is caused by various natural, economic and social factors and also by local traditions. However, one must be able to look beyond the details and particulars and glimpse the general regularities and trends in

the development of the private plots. This will make it possible to direct their development into the proper channel and strengthen their relationships with public production.

\* \* \*

From the Editorial Board. While in agreement with the principal positions raised in the article by V. Sidorenko, the Editorial Board nevertheless must note that in some of the economic questions associated with raising cattle on LPKh's on the basis of agreements, there is no single opinion being expressed among the scientists and specialists. Obviously, it will be useful to continue the discussion of this problem. One requirement is beyond question -- and this has already been discussed in the publication entitled "An Agreement Is More Costly Than Money" (SELSKAYA NOV, No. 2, 1985) -- today the statutes and instructions must be observed in a very strict manner.

With regard to references in the journal to the experiment carried out by the Transcarpathian Experimental Station, they touched upon only individual aspects of this experiment and did not pretend to evaluate it on the whole.

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AGRO-ECONOMICS AND ORGANIZATION

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FURTHER DEVELOPMENT OF INTERFARM COOPERATION ADVANCED

Moscow EKONOMIKA SELSKOGO KHOZYAYSTVA in Russian No 8, Aug 85 pp 48-52

Article by A. Zavgorodniy, chief of the Main Administration for USSR Ministry of Agriculture: "Effectiveness of Interfarm Cooperation Under Operating Conditions of Agroindustrial Associations"/

Text During the April (1985) Plenum of the CPSU Central Committee, emphasis was placed upon the important role being played by the conversion of the national economy, and particularly the branches of the agroindustrial complex, over to the path of intensive development, accelerating scientific-technical progress and improving administration and the economic mechanism.

Agricultural production is a central element of the agroindustrial complex. One of the chief paths to be followed for intensification and raising labor productivity is that of production specialization and concentration based upon further development of interfarm cooperation.

According to data supplied by the USSR TsSU Central Statistical Administration, on 1 January 1985 there were 1,700 interfarm enterprises for the production of agricultural products operating within the USSR Minselkhoz Ministry of Agriculture system and 2,200 kolkhozes and sovkhoses engaged in carrying out individual production functions (mainly in the production of livestock husbandry products) on an interfarm basis. These interfarm formations are annually obtaining an increase in live weight in all types of livestock and poultry on the order of approximately 1.7 million tons, which amounts to more than 10 percent of the overall average annual volume of such production in the public sector, they are raising approximately 400,000 heifers and first heifers, which are being turned over to the milking herds of kolkhozes and sovkhoses throughout the country and they are producing a considerable quantity of mixed feed and rich feed mixture.

In 1984, the interfarm enterprises (excluding construction enterprises) realized a profit (mainly from the sale of livestock husbandry products) of 764.5 million rubles and kolkhozes and sovkhoses which carried out separate production functions based upon the principles of interfarm cooperation -- 550.9 million rubles.

In a number of union and autonomous republics, krays and oblasts, the output of interfarm formations constitutes the principal portion of all livestock husbandry output. Thus, in the Moldavian SSR and in accordance with the system



of the Council of Kolkhozes, more than 60 percent of the overall increase in live weight in cattle and approximately 80 percent of the increase in live weight in hogs are being obtained on the basis of interfarm cooperation and almost 90 percent of all heifers are being raised on this basis. Twenty-five percent of all beef being produced in the Uzbek SSR is being obtained on an interfarm basis. In other union republics, a large portion of the livestock husbandry output is being produced by interfarm formations.

A strong logistical base has been created in the interfarm formations of the USSR Minselkhoz system. At the beginning of 1985, the value of the fixed productive capital at interfarm enterprises (excluding construction) alone exceeded 5 billion rubles and the capital-labor ratio for one average annual worker was 22,200 rubles, or higher than that for kolkhozes and sovkhoses by factors of 2.3 and 1.5 respectively. All of this promotes a situation wherein these enterprises have better indicators for their production activities than do the kolkhozes and sovkhoses. For example, in 1984 the average expenditure of feed at these enterprises, per quintal of increase in live cattle weight, was less than the average for kolkhozes and sovkhoses throughout the country by 17.5 and 23.5 percent, per quintal of increase in the live weight of hogs -- less by 38.1 and 14.8 percent and the average daily increase in live weight for one head of cattle was higher by 57 and 48 percent respectively. The difference in the labor expenditures per unit of livestock product was especially considerable: 49.5 man-hours were expended per quintal of increase in live weight at kolkhozes and at sovkhoses -- 36.8, and at interfarm enterprises -- only 15.9 man-hours.

With the creation in the rayons, oblasts, krays and autonomous republics of new organs of agricultural administration -- agroindustrial associations -- more favorable conditions became available not only for further developing the processes of interfarm cooperation in the production of livestock husbandry products but also for realizing more fully their production potential. The standard statute governing a rayon agroindustrial associate gave broad powers to its council. In particular, they can centralize the carrying out of individual production functions, with these functions being assigned to individual farms; they can regulate the economic relationships between cooperating farms by establishing mutually advantageous accounting prices for the livestock, feed, material and other resources and through approval (based upon standard normatives) of the estimates (rates) for services rendered and for work carried out within the agroindustrial associations; they can resolve other problems aimed at raising the operational effectiveness of the interfarm formations.

Many councils of agroindustrial associations have carried out a considerable amount of work in connection with the development of specialization and concentration in the production of livestock husbandry products, based upon interfarm cooperation and in keeping with the operating conditions of the new organs of agricultural administration. For example, there are more than 100 interfarm formations of a livestock husbandry nature in operation in Cherkassy Oblast, including 21 interfarm enterprises for the final fattening of cattle, 39 farms carrying out production functions associated with the maturing of young cattle stock on an interfarm cooperative basis, 21 such farms for the raising of heifers and more than 20 farms for the production of pork and poultry products. In 1984, the interfarm formations were supplied with 122,900 head of young cattle stock for maturing and fattening, including 85,300 young bulls, or more than one half of all cattle being supplied to the oblast at

the time for maturing and fattening. Roughly 60,800 tons of beef were produced on an interfarm basis and sold to the state; this constituted 49.6 percent of the total volume of beef produced and sold at kolkhozes and sovkhozes.

All of this had a substantial effect on the development of the beef cattle husbandry branch throughout the oblast as a whole. For a number of years now the meat combines have been receiving cattle of high weight condition and a good state of nourishment. In 1984, the live weight of one head of cattle sold to the state was 408 kilograms and approximately 91 percent of the animals were in a high state of nourishment. Cherkassy Oblast surpassed to a considerable degree a number of oblasts in the Ukrainian SSR in terms of beef productivity. The computations of specialists attached to the UkSSR Minselkhoz /Ministry of Agriculture/ reveal that if all of the oblasts had achieved its productivity the republic would have produced more than 300,000 additional tons.

Many interfarm livestock formations in this oblast achieved a high degree of production efficiency. Thus, at the Palmirskoye Interfarm Enterprise, on the average for the past 4 years, the average daily increase in the live weight of one head of cattle during fattening exceeded 1000 grams, the average delivery weight of one young bull reached 435 kilograms and in 1984 the figures were 1,060 and 437 kilograms respectively. For 1 quintal of increase in weight, 710 feed units of feed were expended, including only 220 feed units of concentrated feed and 91.62 rubles worth of physical-monetary resources were spent. All of the profit from the sale of livestock exceeded 2.3 million rubles, 85 percent of which was distributed among the farms -- participants in cooperation. A high return was also achieved from the efficient use of production capabilities -- in 1984 the increase in live weight in young stock per cattle billet amounted to 312 kilograms. During the 1st quarter of 1985, the enterprise sold more than 3,300 head of cattle to the state at an average live weight per head of 468 kilograms, with the average daily increase in live weight for a young bull reaching 1,170 grams.

The interfarm enterprises for the fattening of cattle in Khmelnytskyi Oblast are operating in an efficient manner. In 1984, as a result of the introduction of a leading technology for the fattening of animals, progressive forms for labor organization and wages and, in particular, the collective contract, they fattened and sold to the state (towards fulfillment by the participating farms of the meat purchase plans established for them) 35,100 head of cattle at an overall live weight of 13,700 tons. The average daily increase in weight for one animal, for all of the interfarm enterprises on the whole, amounted to 916 grams, with a feed expenditure of 800 feed units per quintal of increase in weight. They realized a profit of 13 million rubles from the sale of the cattle, of which 11.6 million rubles or 88.7 percent were distributed among the farms -- participants in cooperation.

The best production-economic indicators in this oblast are being achieved by the collective of Makovskoye Interfarm Enterprise for the fattening of cattle in Dunayevetskiy Rayon. In 1984, this facility fattened and sold to the state 4,500 head of cattle at an average live weight per head of 398 kilograms, with the average daily increase in live weight per head being 991 grams. Roughly 750 feed units were expended per quintal of increase in weight and 105 rubles worth of physical-monetary resources were spent. The enterprise earned

approximately 1.7 million rubles worth of profit from the sale of the fattened cattle and more than 83 percent of this amount was distributed among the farms -- participants in cooperation. The profitability level for beef production achieved here was 77.9 percent.

The councils of many oblast and rayon agroindustrial associations in the Russian Federation are carrying out a great amount of work in connection with the further development of interfarm cooperation.

Thus the sales volumes for beef in Liskinskiy Rayon in Voronezh Oblast increased by more than twofold following the placing in operation of a sugar plant and the organization of cattle maturing and fattening on an interfarm basis. The Mayak Interfarm Enterprise in this same rayon is from year to year obtaining fine production-economic indicators for the fattening of cattle. It does not have its own land but feed is ensured for its animals on the basis of sugar beet pulp deliveries from a sugar plant and other types of feed by participating farms. The cattle are assigned for fattening at a live weight of 170-190 kilograms. The duration of the fattening is 200-250 days. Here, on the average for the last 10 years, the average daily increase in live weight for one head of fattened young stock was 1,000 grams and the average delivery weight for one head -- 454 kilograms; not more than 680 feed units of feed were expended per quintal of increase in weight, including 230 feed units of concentrates, and 94 rubles worth of physical monetary resources were spent. In 1984 the enterprise realized a profit of approximately 7.5 million rubles. The participating farms are interested in having cattle and feed delivered to it, since the accounting price level established for them here is high and the entire increase in live cattle weight and 80-90 percent of the profit obtained by the interfarm enterprise are distributed among the participants.

High operational indicators are being achieved by a number of interfarm formations for the maturing and fattening of cattle in the Uzbek SSR. The Kolkhoz imeni Ulugbeka in Samarkandskiy Rayon in Samarkand Oblast is engaged in the fattening of cattle on an interfarm cooperation basis. Towards this end, a complex capable of handling 10,000 cattle was built in 1976 on its territory using the resources of 13 kolkhozes and 6 sovkhoses. The entire area of arable land (4,300 hectares, of which 3,400 hectares are irrigated) on this farm is being used for the production of feed. In recent years, the feed obtained here from each irrigated hectare has contained an average of 10,000-11,000 feed units and this has made it possible to satisfy almost completely the needs of the animals undergoing fattening, by means of internally produced feed. As a result of efficient organization of the feed base, the use of a leading production technology and the achievements of a high level of mechanization of production processes, the kolkhoz is achieving fine production and economic indicators. In 1984, for example, it sold cattle to the state (in behalf of plan fulfillment by participating farms) the overall live weight of which exceeded 2,300 tons and thus it surpassed the previous year's level by 270 tons. The average daily increase in live weight per head of cattle amounted to 948 grams and the average delivery weight per head was 492 grams. For 1 quintal of increase in weight, 770 feed units were consumed, 7.2 man-hours of labor expended and 112 rubles worth of physical-monetary resources used. The sale of the cattle produced a profit in excess of 1.9 million rubles and the production profitability level was 59.4 percent. During 9 years of operation by the kolkhoz



on a cooperative basis, more than 6 million rubles were transferred to the participating farms for their share of participation.

The raising of heifers and cow-first heifers as replacements for the milking herds of kolkhozes and sovkhoses is being developed on a more extensive scale based upon interfarm cooperation. The Mayak Kolkhoz in Gusyatskiy Rayon, Ternopol Oblast in the Ukrainian SSR serves as an example of successful work by just such a formation. It has been raising heifers on an interfarm cooperative basis since 1975. Over the past 6 years, the kolkhoz raised and turned over to participating farms more than 15,000 heifers. The average annual milk yield from one cow-first heifer raised from such heifers exceeded 3,300 kilograms and this made it possible to surpass the 3,000 mark for milk yields throughout the rayon as a whole. In recent years, the Mayak Kolkhoz has mastered the leading technology for the raising of high class replacement animals. In 1984, 2,515 heifers were sold to the participating farms and of this number 50 percent were of the elite-record class, 40 percent -- elite and 10 percent -- 1st class.

The Sidabra Interfarm Enterprise in Ionishkiy Rayon in the Lithuanian SSR is from year to year achieving fine production-economic indicators. In 1984, the gross increase in live weight in hogs amounted to 2,600 tons, or more than one third of the overall increase for the rayon. The average daily increase in weight per animal at the enterprise reached 573 grams and per quintal of increase 509 feed units of feed were consumed and 4.4 man-hours of labor were expended. A profit of 1.7 million rubles was realized from the sale of the fattened hogs, with more than 80 percent of this amount being distributed among the farms -- participants in cooperation. Here the profitability level for pork production was 41.8 percent.

The work of the Sidabra Interfarm Enterprise is having a substantial effect on the development of swine husbandry throughout the rayon as a whole. During the last 2 years alone, during which period the enterprise reached its design capability, pork production on the whole in the rayon's public sector increased by 33 percent. The branch's economic indicators also improved: the profit from the sale of hogs, for the rayon as a whole, increased by a factor of almost seven compared to the 1981 level.

There are many similar interfarm formations on a livestock husbandry nature to be found throughout the country. Their operations are characterized by a high degree of effectiveness, since the principal problems -- stable feed support and the introduction of leading technologies and scientifically sound forms for labor organization which have proved their worth in practical work -- have been solved most completely in them. However, despite the clear advantages which the specialized interfarm formations possess over multiple-branch farms, a number of local agricultural organs and rayon agroindustrial associations are still not devoting proper attention to the further development of specialization and concentration in livestock husbandry on a cooperative basis.

In recent years, the number of specialized interfarm formations in some union and autonomous republics, krays and oblasts has not increased and in fact is even decreasing. Thus, over the past 3 years the number of such formations in the RSFSR has decreased by 411, including by 336 in the production sphere for



agricultural products. In the Belorussian SSR, the number of such formations decreased by 66 and 48 respectively. In 1984, all 36 interfarm enterprises of a livestock husbandry nature in the Kirghiz SSR were eliminated.

There are also shortcomings in planning the production activities of livestock husbandry interfarm formations. Quite often the agroindustrial associations assign them purchase plans for many types of field crop husbandry products and this restrains the development of their own feed production operations. Nor is the established order for assigning a sales plan for the sale of products produced by interfarm formations being observed in all areas. For example, in 1983 the Irtyshskiy Sovkhoz in Pavlodar Oblast in the Kazakh SSR, which is engaged in the fattening of cattle on an interfarm basis, was assigned a plan for the sale of meat. This lowered the interest of the farms -- participants in cooperation -- in carrying out the contractual obligations concerned with livestock and feed deliveries and the effectiveness of cooperative production. It was for this reason that the participating farms fulfilled their contractual obligations for delivering cattle to this sovkhoz by only 88 percent and feed -- by 46 percent, compared to 170 and 82 percent respectively in 1982 and as a result the fattening farm utilized only 76.7 percent of its production capabilities. All of this led to a situation wherein the gross increase in live cattle weight decreased by 17.6 percent compared to the 1982 level, meat sales to the state decreased by almost 23 percent, including a reduction of 24.1 percent in the increase in live weight; on the whole and considering all operations during 1983, losses amounting to 981,000 rubles were sustained and in 1984 -- 1,865,000 rubles (the sovkhoz completed the year 1982 with a profit).

In a number of areas, the rayon agroindustrial associations are not devoting proper attention to improving economic relationships between the interfarm formations and farms -- participants in cooperation -- and as a result an equivalent exchange in the results of interfarm operations is quite often not being observed. In this same Pavlodar Oblast, the accounting prices for young cattle stock delivered to interfarm formations for maturing and fattening have not been examined since 1978 and thus during all of the years since that time, as a result of inflated prices for cattle weight, these formations have sustained losses: for example, in 1981 they amounted to 5.4 million rubles, in 1982 -- 5.6 million, in 1983 -- 2.1 million, in 1984 -- 1.5 million rubles.

Quite often there are incidents involving crude violations of the democratic principles for managing interfarm formations and the established norms for production-economic and financial relationships between cooperating parties. The local agricultural organs are not devoting sufficient attention to studying and disseminating the leading operational experience of interfarm formations.

All of these and other negative facts result from the fact that in a number of areas the agricultural organs are not devoting sufficient attention to developing the processes of production specialization and concentration in the livestock husbandry branches based upon interfarm cooperation. Recently, on the staffs of agricultural organs in some union and autonomous republics, krais and oblasts, structural elements which earlier were engaged in solving these problems were either abolished or reoriented towards solving other problems. In the Kirghiz SSR, the work of interfarm formations was coordinated by the

Administration for Interfarm Cooperation and Subsidiary Farms of the republic's Ministry of Agriculture, which at the end of 1982 was reoriented towards solving communal-domestic problems and the development of private plots. At the present time, the staff of the republic's ministry does not have any structural subunit that is engaged in solving the problems of interfarm cooperation.

A similar situation prevails in some other republics, oblasts and krays. Because of the reasons cited above and also for other reasons, many interfarm formations are still working with a low degree of efficiency and are tolerating losses.

There are also other shortcomings in the carrying out of interfarm cooperation which are holding back the development of this process and which are lowering the operational efficiency of the interfarm formations and the livestock husbandry branch as a whole.

The agroindustrial associations and their working staffs must activate the work of further intensifying agricultural production and developing the processes concerned with its concentration and specialization based upon interfarm cooperation, since this will promote the successful realization of the USSR Food Program.

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AGRO-ECONOMICS AND ORGANIZATION

COMMENTARY ON INDEPENDENCE IN KOLKHOZ MANAGEMENT

Moscow IZVESTIYA in Russian 19 Aug 85 p 2

[Article by N. Matukovskiy, IZVESTIYA staff correspondent, Mogilev Oblast:  
"Response to the Article 'The Right to Decide'"]

[Text] The article by V. Starovoytov, chairman of the Rassvet Kolkhoz imeni Orlovskiy and twice Hero of Socialist Labor, entitled "The Right to Decide," was published in IZVESTIYA four months ago. Responses to it are still coming in to the editorial office. This is understandable. The author, referring to his own experience as chairman and to facts from life in Kirovskiy Rayon, Mogilev Oblast, pointedly and convincingly reflected upon the most painful thing in the work of a manager of a farm. Petty tutelage and an abundance of various kinds of instructions, directives, and directions fetter initiative and bind the chairman of a kolkhoz or director of a sovkhos hand and foot.

Just as much has been discussed and written about the vicious nature of this style of management as have solutions been adopted. No matter, the manager of a farm to this day is frequently given orders and "advised" about when, what and how much to sow, when to begin the mowing and when to start the harvesting of grains, what to do first, second, third... In as much as there are not even two farms in existence with identical situations, the harm done by such exhortations is very great. And also this administrative press inflicts even greater injury to the personality of the manager, reducing commanders of production to executives without initiative.

This is a bad situation. But just try to display your "originality." If the year turned out well and independence turned into success, they can forgive you. But, encounter a poor harvest and you can inevitably expect "threats." And most often - drastic changes in personal fortune. "During the last 4 years," wrote V. Starovoytov, "80 percent of the kolkhoz chairmen have been replaced in Kirovskiy Rayon."

...A trip to Kirovskiy Rayon was convincing: the author was not exaggerating. Indeed, a style of management has taken shape in the rayon the essence of which is roughly this: it's an order - don't argue. And if someone takes it into his head to argue and, what is more, to hesitate?...The Kolkhoz imeni Kalinin has its third chairman in 4 years. The Kolkhoz imeni Chapayev, too: first there was Vladimirov, then Arayev was recommended and, at first, they recall,

they could not speak highly enough of him. But, he was removed in the second year. Now a third chairman is in the job.

Of course, when the manager is bad, makes a mess of things, and there is no basis to hope for a change for the better, he must be replaced. And, of course, replaced by a better one. And here there must be a good reserve and the ability of each must be accurately presented. Then there would not have to be any guesswork - will he be successful or won't he? Will he pull it off or not? And if indeed it does not work out, then, upon dismissing the failure, it should be asked, where were the people who recommended him looking? There must be responsibility for the recommendation, for it attests to the quality of the recommending person's work. It is unpardonable to play leap-frog with an appointment to the post of manager, upon whose work and level of maturity the fate of large labor collectives, the fate of farms and their economy depends. Cadres are not trained on fear. As N. Stetsenko of Odessa Oblast accurately notes in his letter to the editorial office: "If the manager is not immediately successful, there is no need to jump to organizational conclusions. Help the person where he is weak, where he has overlooked things. Don't pick him to pieces. Don't come down hard on him, don't frighten him, because these rages have nothing in common with learning or with science. But you know they frighten the person all the same."

And I also was convinced of this in Kirovskiy Rayon - to be exact, they "frighten."

Georgiy Panfilovich Solonovich has been chairman of the Kolkhoz imeni Kirov for almost one and a half decades. It would seem that there is nothing left to teach him when it comes to reaping barley -- he is considered one of the best agronomists in the rayon. But they put the fear of God into him. And the question is, why?

It was like this...the combines drove out into the field and returned. It was announced: "It's not possible to harvest yet, it's too early. The grain is green and the combines will get stuck. We must wait a little for the harvest, if not, then we'll damage the grain and ruin the equipment."

The chairman himself assessed the situation and was convinced: the combine operators are right, we must hold off for a day or two. But it just so happened that the Raykom secretary S. Goncharov, drove by the idled combines.

"Be at the buro in half an hour!" he ordered, without listening to the explanation. And at the buro meeting, blowing up at the chairman, he ordered: "For disrupting the beginning of the harvest Solonovich must be dismissed from the Party!"

Fortunately, the members of the buro did not agree: the matter ended in a reprimand. It is as clear as day that this was unmerited. But really, is such an occurrence unique? When a series of such incidents start to accumulate, then it becomes clearer why the rayon, if at least not falling back, is also not progressing. Who among the kolkhoz chairmen would want to take risks? Who would want to take managerial initiative? Let matters go badly, but you obeyed



orders and carried out instructions. V. Starovoytov alone succeeded in overcoming this vicious circle, perhaps, and he conducts the business of the Rassvet Kolkhoz independently.

I'll remind you that, in raising the question of independence, V. Starovoytov wrote, "I don't want to give you the impression that I'm opposed to all intervention in the life of the farm by higher organizations or opposed to all suggestions, remarks and instructions. No, farms must be assisted and monitored. But in connection with this it must not be forgotten: the monitoring must be judicious and must have nothing to do with petty tutelage."

And here is what another distinguished chairman, Vladimir Antonovich Ralko twice Hero of Socialist Labor and chairman of the Osnexhitskiy Kolkhoz of Pinskiy Rayon, Brest Oblast, has to say:

"Who is he, the contemporary chairman? Foremost he is a fine specialist and a respected man with great practical and moral, if you will, experience, and a staunch communist (and you'll agree that it would not be worthy to choose another type of man). And if, indeed, he has been entrusted with human destiny, millions in cash, complicated equipment and a host of animals, then trust him also to run the farm. What is sown, when and how, this is the farm's concern and no one else's. There can not be any doubt on this score. Pique the collective's interest with the price of goods, with the material goods available, and not with directions about what and how to sow. And further: once and for all, create such an economic situation so that it is not I who had to run begging to my associates, but they who came to me to seek work, their earnings... This is the kind of independence that is necessary today. After that it will not be unjust to ask also about the results of management. And I will personally be ready to answer to the strictest accounting."

Vladimir Antonovich is right. Independence and responsibility are indivisible: the more that is given to the manager, the more he is made responsible. But, if he can not take a step independently, [he acts] "strictly by permission" - this is only an outward show of responsibility. For if there is nothing to answer for, he himself has decided nothing. And the replacement of a manager by an executive is simply connected with the reproduction...of bad management.

"Yes, isn't it indeed, who should manage?" - states V. Ralko. "Isn't this the root of our problems? Presently, every kolkhoz has up to two dozen professionally qualified specialists. As a rule, they know the business and can teach anybody. We should untie their hands, intelligently guide them, and not command..."

And in this, perhaps, is the heart of the whole problem of the development of independence. Not to replace and not to watch over every step. And to more frequently remember the present-day demands and instructions of the Party on that account. The plan for the sale of products to the government is really the main thing - evaluate the work and make one answer for it on the basis of the fulfillment of this first commandment.

It is hardly worth it to repeat that truism, but life demonstrates that some people think it does not apply to them. And what is more, even its truth is questioned.

Not long ago in Mogilev Oblast a seminar for managers of farms and rayons took place. At this, one of the oblast managers (in the performance of his duties, it would seem, obliged to support people who have initiative, who are thinkers and who are business-like) suddenly subjected the article "The Right to Decide" and its author to criticism for "seditious" thoughts about independence. It is true that V. Sarovoytov himself was ostensibly absolved of "sin," but how. The conference participants heard it said: if V. Starovoytov attained "independence" (just the word which was used in the presence of 700 people), then others have not. And it is not necessary for them to attain anything because they manifest too much "independence" as it is. And currently, this is practically the main root of all problems.

And so it turns out that one has attained independence and another has not? And who and on whose authority was this judged? And isn't it strange to hear this sort of thing at this time, when the entire country is going through a strenuous search for effective forms of management, when economic methods of administration are being employed, and when precisely that ability to manifest activity and initiative and take responsibility is so highly regarded.

But perhaps, isn't it the truth that has been thrown away on those farms? I'll tell you about my meeting with yet another manager.

...The main concern of V. Polivkin, chairman of the Third Congress of Soviets Kolkhoz, is to bring the farm out of the hole into which it plummeted during the time of his predecessor, S. Gruzdrov, appointed (in punishment, perhaps, since there was nothing to give incentive to do so) by the chief of the rayon agricultural administration. Gruzdrov acquired a 3 million ruble debt, and now Polivkin must repay it. He has managed a million. And he considers and ponders as to what to sow and how to sell it most advantageously in order to more quickly settle the account and to find money to carry on management.

"Out land is such," says V. Polivkin, "that no matter how hard you work, even if you kill yourself, the yield is not more than 20 to 25 quintals of rye. But, on the other hand, it yeilds 40 quintals of barley and all of 60 quintals of oats. So what is more profitable both for the kolkhoz and the government? I'll sow oats - we'll have feed, and barley - we'll sell it to the government with a big profit for ourselves: for each ton, along with the above-plan increments, they pay 270 rubles apiece. But I am commanded by the rayon: sow 400 hectares of rye but no more than 8 hectares of oats. How much strength and nerve must we have in order to sow sensibly in the present year. Well, all right. The second offense: I try my hardest to do my job. But they reproach me: "individual farmer", you don't see beyond your own nose.

Maybe in Mogilev Oblast this is considered "independence." It is evident that concepts got mixed up here if an economical managerial action must be "punched through" on someone's nerve, and one must defend oneself against instructions.

"It approaches the ludicrous," recalls V. Afon'kin, chairman of Krasnyy Boyets Kolkhoz. "Once, an authority from the oblast arrived just when we were sowing beets. The sowing machine is an ordinary one that plants in rows, so machine operators, in order that the rows came out more widely spaced, were closing up

a portion of the seed spouts with wooden stoppers. Having spied the stoppers, this authority began to cause a stir: 'What is this? Who sows in such a manner!...' People turned away to laugh into their sleeves - somehow it was embarrassing to laugh in the man's face, after all, he's from the oblast center. I took him aside and explained. The poor fellow was even taken aback, from confusion most likely, and admitted: 'I don't understand anything about agriculture.' Why then," I asked "did you come here to teach? 'I had no choice,' he answered. Comical? Not to me..."

"It is also ordered when and what to build," lamented G. Solonovich, chairman of the Kolkhoz imeni Kirov. "It was vitally necessary to finish two cow sheds and to reconstruct the pigsty by autumn. There were practically no laborers to lend a hand. We did everything ourselves. And suddenly the command: throw aside what you have started and build stalls for the summertime care of sows!... Stalls are, of course, necessary. But a pigsty is even more necessary since animals are kept in it both summer and winter."

Maybe this is also meant to prevent excessive independence?

...I am sorting through a bundle of letters. All are in response to V. Starovoytov's article "The Right to Decide" and they are innumerable. But I'll still cite a few lines from a letter by the chairman of the Kolkhoz imeni Zhdanov of Glazunovskiy Rayon, Orel Oblast: "The wall of articles and instructions greatly damages the affairs of the kolkhoz. If the chairman just barely deviates from policy, scores of controlling organs sweep down upon him. We managed to count them up and it turns out that more than 30 rayon chiefs can give orders (and do give orders!) to kolkhoz chairmen."

The mail is convincing: not only just in Kirovskiy Rayon alone has a very peculiar understanding of the independence of the farm chairman. It is not just in Mogilev Oblast that they now and then replace concern over the adjustment of the economic mechanism, and business-like and competent management, with banging their fists on the table. This is not the modern style! The time is such that all must improve their work methods anew--from the laborer to the minister. All must independently assimilate new approaches toward the business at hand. And with no delay, for there is no other way.

12911/12790  
CSO: 1824/3

# EXPERIENCE OF GEORGIAN APK OPERATIONS EXAMINED

Moscow TRUD in Russian 26, 28 Jul 85

[Article by G. Lisichkin, Candidate of Economic Sciences and O. Chikhladze, special TRUD correspondent, Tbilisi-Zugdidi: "Without Barriers"]

[26 Jul 85 p 2]

[Text] During the April Plenum of the CPSU Central Committee, it was stated that: "Further improvements are required in the administration of the agroindustrial complex." And at a meeting with the leaders of industrial associations and enterprises, kolkhozes and sovkhozes, production brigades, specialists and scientists, which took place in the CPSU Central Committee, approval was given for the experience of agroindustrial integration in Georgia where, based upon the former ministries of agriculture and land reclamation and water resources and also Gruzselkhoztekhnika, a single state committee for agricultural production was created which has undertaken to administer the agroindustrial complex on a non-departmental basis. It is about the Georgian experience that we are telling you today.

## 1. Miniature-Factory of a Plantation

In the village of Kakhati, which is located in Zugdidskiy Rayon, the Kolkhoz imeni Karl Marks has from year to year been unable to harvest and deliver its tea leaves for processing in a timely manner, which it cultivated under great difficulty out on the plantations. The reason was apparent to all. The planting areas had been expanded, the cropping power of the tea bushes had increased and yet the production capabilities of the state processing factories, which belong to the Goskomchayprom system, remained the same. If the Kolkhoz imeni Karl Marks did not produce tea, but rather for example marble, gravel or some other metal articles, then such delays in processing could be tolerated: the marble could be delivered to the plant, unloaded and thereafter just lie in waiting. But agricultural products cannot be allowed to lie around; each extra hour constitutes irretrievable losses. And this applies not only to tea leaves, but also to tomatoes, potatoes and milk. Here we are speaking of a very typical and widespread vice of the agroindustrial complex -- the disproportion between the development of the raw material base and the processing industry, a vice which is extremely destructive from an economic standpoint.



Actually, if the tea leaves are not harvested in a timely manner, the development of the tea bush is delayed. At the Kolkhoz imeni K. Marks, it has been estimated that disruptions in the harvesting schedules alone cause an annual loss per hectare of approximately 3 tons of tea leaves, roughly 20-25 percent of the balance of one of the republic's best farms. But this is not all. Tea leaves which are allowed to stand too long become coarse and the kolkhoz receives a much smaller amount for them. And all of these problems take place for the same reason -- the capability of the processing enterprises is low and they are unable to handle the raw materials being supplied to them by the kolkhozes.

This sad situation, one which is familiar to other areas and associated with other types of agricultural products, was described to us during a discussion with Karlo Ivanovich Dzhgushiya, deputy chairman of the kolkhoz and Temuri Davidovich Chakhaya, the kolkhoz bookkeeper. But they did not discuss this situation simply for the purpose of complaining, but rather they wished to point out how justified were the measures undertaken by the kolkhoz for correcting this vicious practice.

Using its own money, the farm purchased equipment and built a miniature-factory literally within 40 days, one which at the present time is processing approximately 1,500 tons of tea leaves annually. It can be stated immediately that the kolkhoz miniature-factory is a modern enterprise and not an antiquated or archaic shed that is filled with written off equipment and which operates in accordance with the well-known principle of an antelope gnu.

Last year alone, the factory produced 418,000 rubles worth of net income -- almost one fourth of the farm's total profit. And its construction cost 360,000 rubles. Thus the kolkhoz capital investments are being repaid in less than 1 year. The products being produced by the factory are of an extra high class and cannot even be compared with the principal bulk of the products being produced by the Chayprom enterprise. Karlo Ivanovich and his colleague Temuri Davidovich explain this circumstance as being extremely materialistic. The kolkhoz plantation is alongside and thus the leaves are delivered while still fresh and strictly according to schedule and this makes it possible to observe from the very beginning the technology for the process. At the Chayprom enterprise, the raw material is brought in from a distance of 10 and 15 kilometers and with crude violations of the schedules.

Secondly, tea production is seasonal in nature. This results in considerable personnel turnover at Chayprom enterprises. During the season, each kolkhoz sends a brigade to lend assistance. It is easy to imagine the varied nature of the collective that assembles here. The same people work at the kolkhoz miniature-factory as are found working on the tea plantations. Here the work nucleus does not collapse, but rather it becomes more united. Moreover, the final payment for their labor is dependent upon the income and this on the whole ensures the cultivation and processing of the tea leaves.

Let us now pose a question: why is it that a department, in this instance Chayprom, is under a special obligation for ensuring that everything produced at the kolkhozes and sovkhoses is processed in a timely and high quality manner and for not doing this the kolkhoz is forced to carry out functions

which are not normally expected of it, functions which even a specialized organization is better able to handle? The reply is disarmingly simple: Chayprom did not have the money required for building processing enterprises in the various areas. And the money was not available owing to the fact that the Georgian Ministry of the Food Industry did not allocate any for the association. For its part, the Georgian ministry acted in this manner not out of economic stupidity but rather as a result of the fact that a union ministry does not allocate expenses for this item during the period when the present five-year plan is being implemented. But this was done not as a result of a mistake on the part of a specific worker, but rather because the higher planning and financial organs could not provide everything that was being requested of them.

Thus it is practically impossible to find the party who is guilty of the disproportion. Yes and physically he does not exist, since the situation which developed is the natural result of the departmental approach employed for developing the economy generally. Nevertheless, a reference to a lack of money on the part of the appropriate department cannot serve as justification for a loss in the fruits of human labor. The Kolkhoz imeni K. Marks built the factory not by means of a kind uncle. It found the money, man-power and wage fund needed. Thus, everything was available. Only one factor was missing -- the opportunity for the departmental organizations to use them within the framework of existing instructions.

Moreover, objections are raised against kolkhoz miniature-factories based upon departmental economies. What do we have in mind here? As already mentioned, the factory at the Kolkhoz imeni K. Marks processes 1,500 tons of leaves during a season. The state results are greater: 8,000-12,000 tons. For such production volumes, the labor productivity is higher and the return from capital increases more rapidly. Indeed the number of workers is roughly the same and yet the output in the latter instance is naturally greater. Who wishes to build capabilities which will lower the indicators and bring about a decline in those figures upon which an evaluation of a department's successes in developing the program assigned to it are based? This is why not only the food industry workers but also builders, land reclamation specialists and even other agricultural partners are searching for endeavors at the kolkhozes and sovkhoses which will "work" mainly in behalf of their departmental plan and not for the overall interests.

Indeed, departmental production optimism alone, which takes into account the processing of the raw materials, and optimism which takes into account the production expenses, are values which are absolutely beyond comparison. Yes, labor productivity is higher at the large factories and yet if we take into account those tons of tea leaves which the kolkhozes failed to receive because of inability to deliver them on a timely basis for processing, if we add the gain in the quality of the product obtained and if we include in the computation the tremendous transport expenses, then the facts stand out abundantly clear.

Moreover, Chayprom does not remain that indifferent to the miniature-factories. Quite to the contrary. Karlo Ivanovich complains that if he had five rollers the factory would operate at full capability, that is, it would process twice as much raw material as it is handling at the present time. But Chayprom is in no

hurry to aid the farm in purchasing equipment. Yes and why should it become upset over someone else's child?

This is all very true. But what about the State Committee for Agricultural Production that was recently created here in Georgia? It bears mentioning that the tea factory at the Kolkhoz imeni K. Marks was built in 1980 -- two years prior to the creation of this committee. And yet...

One swallow does not make a springtime. Nor do two of them. And if points for the processing of raw materials spring up on other kolkhozes, they still will not be included in the economic system and they will turn out to be isolated and suffer from the fact that they will be unable to obtain equipment, spare parts and specialists in a planned manner.

Thus the Georgian State Committee for Agricultural Production has become a competent protector and guardian of the miniature-factories that are being created in the vicinity of raw material production points. But this is not the only aspect of the problem. A centralized fund is being formed by means of withholdings from the income of the farms and enterprises included in its system and this fund is being used for extending credit to those kolkhozes and sovkhoses which lack the money required at a particular moment for building a factory. Moreover, a special subunit is being formed within the state committee's structure which will ensure, on a centralized basis, that they are supplied with everything required for rhythmic operations.

As a result of the new socio-economic atmosphere created by the State Committee for Agricultural Production, 37 miniature-factories for the processing of tea leaves have already been created in Georgia within a short period of time. They are already handling successfully approximately 10 percent of the gross output. But this is only the beginning. The capabilities can be utilized considerably more productively. And then raw materials will no longer be lost on the farms, materials which involve considerable expenditures of labor. Thus the experience of the Kolkhoz imeni Karl Marks is by no means that of a crazy swallow which accidentally flew into Georgia, but rather it testifies truly to the onset of an economic spring.

We foresee a question: all of this is perhaps quite true and yet one can only ask why the Ministry of Agriculture did not do this earlier? Because its structure was not suitable for solving inter-departmental problems. It lacked the means and the specialists required for carrying out this work in a skilled manner. Only the State Committee for Agricultural Production, which includes several departments, could undertake this task: orient itself towards the final product and lessen the disproportion between the production and processing of the raw materials. And experience has shown that perceptible results are achieved within a short period of time.

/28 Jul 85 p 2/

## 2. Among Partners -- A Common Interest

It was at Gori that we made the acquaintance of Givi Georgiyevich Abalaki, 1st deputy chairman of the RAPO /rayon agroindustrial association/. Having passed

through the difficult school of work in all structures of the agricultural administration, beginning with the post-war MTS's /machine and tractor stations/, Givi Georgiyevich can easily evaluate the advantages which a rayon agroindustrial association realizes under the new conditions. The chief such advantage is the fact that all of the kolkhozes, sovkhoses, inter-farm organizations, land reclamation services and the Selkhoztekhnika collective find themselves for the very first time under the same rayon subordination. And all of them are making differentiated contributions to the centralized fund depending upon their profitability levels. In particular, the Goriyskiy RAPO already has more than 700,000 rubles in the centralized funds. How are they being used?

Givi Georgiyevich discusses the problems of small mountain villages. Cut off from the rest of the world, they become old and gradually disappear. And yet it is precisely in the mountainous regions where extremely favorable conditions are found for the development of livestock husbandry. How can the migration processes be halted? The rayon workers are constantly devoting thought to this question. And it was not possible to provide a practical answer to this acute social question, since any one of them would be based upon additional capital investments, which were almost impossible to come by under the former conditions. The RAPO has now allocated 120,000 rubles: dispatcher communications have been established, repairs have been carried out on roads and ramshackle buildings and a network of homes has been built. And the result is already apparent: the migration has stopped and 25 families have even returned to the areas inhabited by their forefathers. Nor is it rare for such socio-economic initiatives to be associated with a RAPO.

The monopolistic nature of the status of agricultural partners was undermined with the creation of the State Committee for Agricultural Production. Here is how this appears, for example, in the case of Selkhoztekhnika. As is known, the local departments of this association were provided with a plan for the repair of equipment, for operating it and for transporting freight, similar to a sales plan in rubles. For the purpose of carrying it out, special importance was attached to finding a suitable client and a favorable assortment of services. Interestingly enough, in 1982 a kolkhoz in the village of Zerti in Goriyskiy Rayon concluded an agreement with Selkhoztekhnika for 56,000 rubles, but since the partner was located nearby and was thus "suitable," work valued at 140,000 rubles was carried out there, while at the same time only 36,000 rubles worth of work was carried out at a distant mountainous kolkhoz in the village of Ateni. Under such a system, it came as no surprise to learn that, during this same year of 1982, the Gori Branch of Selkhoztekhnika was awarded the challenge union red banner and its workers -- monetary bonuses, while at the same time only three of the 13 kolkhozes in the rayon which it serviced fulfilled their plans in terms of profit.

With the creation of the republic state committee, the plans began to be composed in a different manner, based upon the requirements of those who work the land. For example, at enterprises of the former Selkhoztekhnika the decision was made to repair only one half of the tractors usually sent there, with the remaining units to be repaired by the farms themselves, after receiving the spare parts which were formerly handled by their partner on a monopolistic basis.

This occurred during the conversion over to centralized freight shipments. In this same Goriyskiy Rayon, prior to the reorganization of the system of



agricultural administration, 63 vehicles traveled the roads delivering fuel to the farms. At the present time, the RAPO has organized centralized deliveries and it turns out that 14 motor vehicles are coping with this task in a fine manner.

Let us direct attention to still another circumstance: the phenomenon of a shortage in logistical supply. It turns out that it often develops not because of a shortage of machines, equipment or spare parts, but rather owing to the vicious departmental practice employed in distributing them.

Certainly, considerable importance is attached to the new method for planning the services being provided for agriculture. But it cannot be employed in the absence of reorganization of the entire logistical supply service for agriculture, which was implemented during the past 2 years in Georgia. First of all, the logistical funds which were formed separately for the three former departments have been merged into a "common pot." But, most importantly, the distribution principle has been changed. The former Selkhoztekhnika, based upon departmental interest, was in haste to satisfy first of all the needs of its subunits for new equipment and spare parts. Acting through Selkhoztekhnika, the planning organs provided the farms with funds and Selkhoztekhnika skimmed the cream off the milk for itself. The State Committee for Agricultural Production and its organs in the various areas -- RAPO's -- have become the sole masters of the funds and they are distributing them to the exclusion of departmental interests and based mainly upon the interests concerned with increasing the production of goods.

In order to understand the distinction between the new organ for agricultural administration, created in Georgia, and those with which we are familiar, one important principle of its operation must be clarified: the distribution of functions and the administrative levels. We will explain this by using a well known example. Unfortunately, the practice of petty support has still not been eliminated from the work of the organs of agricultural administration. The kolkhozes and sovkhoses are being provided with a mass of indicators and this prevents them from finding and introducing optimum variants for the development of production. At the present time, the farms in Georgia are not receiving one directive figure concerning the structure of the sowings or the herd. They are determined at the kolkhozes or sovkhoses based upon a consideration of the need for carrying out the plan for selling agricultural products to the state.

We held a conversation with the chairman of the Zugdidskiy RAPO, Murman S alvovich Demuriya. "Earlier" he stated, "they imposed a plan upon us for the sowing of soybeans -- 1,200 hectares. This crop grows very poorly in the sub-tropical dampness found in our rayon. Upon receiving the right to determine ourselves the structure for the areas under crops, we reduced the soybean sowings to 400 hectares and the land thus made available was occupied to better advantage by corn."

Released from the petty support of the farms and having tasked RAPO with carrying out those tasks which do not extend beyond the rayon's limits, the state committee could concern itself with those affairs which nobody was attending to and particularly the working out of the economic mechanism.

The wage problems required intervention. Practical workers long ago directed attention to the status of those workers who are engaged in equipment repair work. A machine operator receives 250-300 rubles and he is due a payment in kind based upon the annual results. Fitters however do not receive any additional payments; their wages are in no way linked to successes out on the fields.

The State Committee for Agricultural Production found a method, within the framework of existing statutes, for changing the situation: for over-fulfilling the plans for gross output production, even the repair workers receive a bonus added on to their wages. Moreover, improvements were carried out in the organization of the work and this made it possible to increase somewhat the plan for the servicing of tractors. And here is the result. The fitters can earn 180-200 rubles per month plus a payment in kind.

Wages are not the only element of the economic mechanism which is presently undergoing improvement upon the initiative of the state committee. Within the limits of today's opportunities, it is searching for means for improving the formation of prices and it has already examined some prices for transport services and it is searching for an opportunity for compensating economically for poor managerial conditions in almost inaccessible regions, with a subsidy fund being created for this purpose.

There is still one other important feature which distinguishes the state committee from the traditional organ for agricultural administration. The strict limitation placed upon farm initiative by budgetary resources, which are allocated only for special purposes. Thus, if a farm requirement suddenly arises for building for example a starch or tea factory, the work cannot be carried out owing to a lack of above-plan money and also the appropriate funds -- cement, brick, equipment. And here the state committee can not only recommend but in fact it can allocate the initial capital investments and ensure that the construction project is supplied with the needed materials and equipment -- which it now has at its disposal.

Approximately 36 million rubles accumulate annually at the present time in the centralized funds of the state committee. This is now happening owing to the fact that with growth in farm profitability an increase is also taking place in the total amount of withholdings for adding to the centralized funds. It bears mentioning that this dependence of an administrative organ upon the successes of elements being administered is also a new phenomenon of the APK /agroindustrial complex/: if one administers in an unwise manner, he cuts off the bough upon which he is sitting.

The state committee presently has under its subordination a number of large enterprises which it utilizes for solving general republic production problems. And when nature cast natural calamities down upon Georgia this year -- unprecedented cold weather, unparalleled snowfalls and spring flooding -- the republic, with centralized potential at its disposal in the State Committee for Agricultural Production, was able to accomplish that which earlier it was incapable of doing. By transferring powerful items of equipment and other resources into the emergency areas during the critical moments, they succeeded in alleviating the dangerous situation which had developed here.

One can make a judgment concerning the positive results of the work carried out by the State Committee for Agricultural Production by studying the direct results of the farms. In 1982 there were 383 unprofitable farms in Georgia, in 1984 their number fell to 84 and at the present time there are only 36. The profitability of agricultural production increased twofold during this period! Having concentrated the material resources in its own hands and having assigned the goal of subordinating all actions by the APK partners to increasing the production of agricultural products, the state committee is being transformed into an effective factor for accelerating the socio-economic development of the rural areas.

7026

CSO: 1824/17

# AGRO-ECONOMICS AND ORGANIZATION

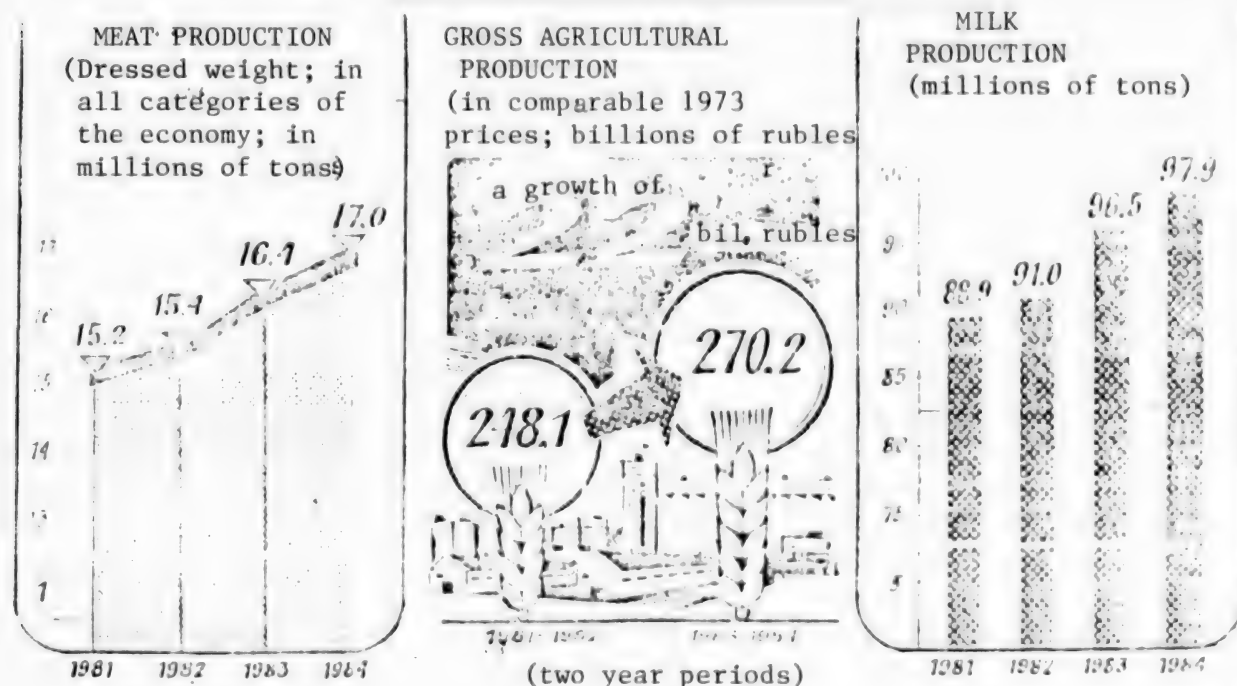
## TSELINOGRAD PARTY AKTIV REVIEWS FOOD PROGRAM PROGRESS, TASKS

Moscow EKONOMICHESKAYA GAZETA in Russian No 38, Sep 85 p 1

[Article entitled: "Toward Realizing The Food Program"]

[Text] A thorough discussion of the tasks associated with realizing the USSR Food Program and speeding up scientific-technical progress in agriculture and in other sectors of the agro-industrial complex took place at a meeting of the party-economic aktiv in the city of Tselinograd.

We have achieved definite successes since the May (1982) CPSU Central Committee Plenum which adopted the USSR Food Program and other major decisions covering impending APK [agro-industrial complex] problems. We are continuing the extensive modernization of agricultural machine building, are approaching our goals in mineral fertilizer production and have considerably expanded the supply of reclaimed land. We have also expanded the work of socially transforming villages.





The increase in the purchase prices and the increases in agricultural production, the introduction of advanced forms for the organization and payment of labor, for economic calculations and collective contracts have all had a favorable effect on the economic situation and the results of kolkhoz and sovkhoz economic activities.

All of this facilitated an increase in the total volume of agricultural production. In 1983-84 production rose nine percent as compared to the two previous years of the 11th Five-Year Plan. The grain, potato, sugar beet, vegetable and fruit harvests increased. The average annual meat production for those years increased by nine percent, milk by eight percent and eggs by six percent. By adding in the completion of this year's plan, procurements of livestock products will increase by the following amounts: meat (dressed weight) -- by 2.5 million tons; milk -- by 9.2 million tons; and eggs -- by 3.5 million eggs.

The number of unprofitable sectors has fallen significantly and the level of kolkhoz-sovkhoz production earning capacity on the whole has increased. According to the results of 1984, clear profit from kolkhozes and sovkhozes, adjusted for annual rates, was about 20 billion rubles and the production earning capacity was 18 percent. The increase in agricultural production had a positive effect on the per capita food product demand in our country.

As was noted at the meeting, there are still a number of sectors that allowed themselves to slow down completion of the tasks called for by the Food Program. Shortcomings and oversights in work seriously affected the success of measures designed to give agriculture and most of all farming greater stability.

The key problem in agriculture is further accelerating and steadily building up grain production. We have been assigned our task -- to get to the point where the country gets no less than 200 million tons of grain even in a year with unfavorable weather conditions and under normal conditions it gets 250 million and more tons. And we must not only increase the production of grain, feed, meat, milk and other products, we must use these products wisely.

M. S. Gorbachev dwelled on a number of practical issues associated with resolving our assigned tasks in his address to the meeting of the party-economic aktiv in Tselinograd. He stressed that we had to be more bold in making the transition to new advanced technology in plant growing. Much here depends on qualified cadres and their professional training. We cannot get major successes without a thorough knowledge of farming. An important factor for increasing land productivity is using the possibilities of scientifically based farming systems. These are available for each zone and in fact for every crop. But they are not being used very well in all locations. We have to drastically increase our return from reclaimed lands and guarantee the general cultivation of agricultural crops on this land by using intensive technology. The party-economic aktiv meeting placed a lot of attention on the problems of storing and processing agricultural products and accelerating the development of animal husbandry.

We must guarantee that all kolkhozes, sovkhozes and other enterprises in the agro-industrial complex work profitably, boldly adopt economic economies and make maximum use of the initiative of labor collectives in developing their plans for 1986 and the 12th Five-Year Plan.

As was noted at the CPSU Central Committee Politburo meeting, the successful realization of the tasks assigned at the meeting has a lot of significance in reinforcing party activity, in putting the agrarian policy firmly into action and in more successfully resolving the country's social-economic tasks as a whole. It was stressed that the industrial-economic potential that has been created in the agrarian sector allows us to make the transition to a large-scale introduction of intensive management methods and to use this to accelerate the tempo of growth both in production for the population and in raw materials for industry. This must become one of the primary directions in the activities of party, soviet and economic agencies at all levels and in the daily work of labor collectives and the millions of workers in the country's agro-industrial complex.

12511  
CSO: 1824/11

## FORESTRY AND TIMBER

### BUSYGIN ON TIMBER INDUSTRY PROGRESS, PROBLEMS

Moscow LESNAYA PROMYSHLENNOST in Russian 14 Sep 85 p 1

[Article by M. I. Busygin, minister of USSR Timber, Pulp and Paper and Woodprocessing Industry: "Successfully Complete the Five-Year Plan"]

[Exerpts] Forest Workers Day is not only a professional holiday for the many millions of workers in the country's "green shop", but one for the entire Soviet people, the masters of the earth's most extensive forest wealth.

The main task today for all sectors in the national economy is to search out and put into use reserves for improving production efficiency, in the meantime thoroughly accelerating scientific-technical progress and directing the economy to the intensive development path.

There has been a general popular response to the party's call to work in a more organized manner and to strengthen plan and labor discipline. It is necessary for us to eliminate shortcomings in planning and material-technical supply, which frequently led to idle time, storming, overtime and failure to fulfill plan targets and obligations. There can be no toleration of some managers, party and trade union organizations becoming accustomed to low levels of labor discipline and hiding cases of inefficiency. Forest industry workers know that the country needs wood as much as it needs fuel and metal. The demand for it is steadily growing. It is the task of a large army of scientists, engineers, technicians and all workers in the sector to supply the national economy with forest and paper products and to protect and expand forest resources.

Throughout the 11th Five-Year Plan and the first seven months of 1985, the USSR Ministry of the Timber, Pulp and Paper and Woodprocessing Industry as a whole obtained its entire output growth through improvements in labor productivity, without increasing the number of workers. Sector enterprises producing mass consumption goods are working successfully. They have successfully fulfilled the plans for the first four years of the five-year plan and for seven months of this year for the production of furniture, footwear, matches, paper, linen and other items. For the 11th Five-Year Plan as a whole, overfulfillment of the plan for various mass consumption goods will total more than 800 million rubles.

At the same time a number of enterprises have allowed serious lagging behind the 1985 and 11th Five-Year Plan targets for the timber movements to first landings and the production of the most important products -- cellulose, cartons, sawn timber, boards, veneer and wooden homes.

We also have serious shortcomings in the utilization of science and technology, the scales and quality of production operation reconstruction and technical reequipment, the development of forest regions in Siberia and the Far East, in the solution of a number of linkage problems in forestry and forest exploitation, in particular the practical realization of last year's CPSU Central Committee and USSR Council of Ministers decree on improvements in using forest resources.

An analysis of the situation shows that we have the potential to work better.

Having entered socialist competition to honorably celebrate the forthcoming 27th CPSU Congress, stepping up the pace attained in competition in honor of the 40th Anniversary of the Victory and the 50th Anniversary of the Stakhanov movement and striving to make up the sector's overall shortcomings in the production of the most important items, collectives at many associations, enterprises, shops, sections and brigades are celebrating their professional holiday with great labor achievements. The beacons of socialist competition -- collectives awarded red challenge banners of the CPSU Central Committee, the USSR Council of Ministers, the AUCCTU and the Komsomol Central Committee -- are successfully working. These include: the Moscow Furniture-Assembly Combine No. 1, the Gatchina Furniture Combine, the Druzhba Production Furniture-Woodprocessing Association in Maykop, the Vilnyus Furniture Combine, the Voskhod Scientific-Production Association and the Balakhninskiy Cellulose and Paper Combine.

Almost 1 out of 8 brigades in the timber industry has completed its five-year plan targets. Thus, Pavel Vasilyevich Popov's collective from the Komsomol Lespromkhoz [timber procurement establishment] Tyumenlesprom logged 1,390,000 cubic meters of timber in 4.5 years, and will log 1.5 million by the end of the five-year plan. Eight months' output at LP-19 was 136,000 cubic meters. So far nobody has exceeded this.

The Syktyvar Complex' cardboard making machine comprehensive brigade led by Hero of Socialist Labor P. P. Smirnov is working successfully. Since the five-year plan's beginning it has produced 34,700 above plan tons of cardboard products, saving 21,800 cubic meters of wood and 2.3 million kilowatt hours of electrical energy.

This year the Stakhanov tradition was especially vividly manifested in sawmill operations. The record of the first Stakhanovite in the sector, Vasiliy, Stepanovich Musinskiy, was initially broken by frame sawyers Viktor Nikanorovich Rezanov from the Solombal'skiy LDK [Sawmill-Woodprocessing Combine], later, his example was followed by the frame crews of Kashevarov and Kolodin from Arkhangelsk, and of Kudinova from the Lobvinskiy Forest Combine in Sverdlovsk Oblast. They systematically increased the amount of timber sawed per shift up to 685.5 cubic meters.



The labor upswing caused by preparations for the 27th CPSU Congress and by the decisions of the CPSU Central Committee's April Plenum and the CPSU Central Committee Conference on questions of accelerating scientific-technical progress is also manifested in patriotic initiatives directed towards meeting annual and five-year plans ahead of time. The ministry and the trade union central committee approved the initiative by the Karrellesprom, Central Furniture and the Syktyvar Forest Industry Complex to accelerate scientific-technical progress and, upon this basis, increase production volume and efficiency. This initiative found widespread support at many collectives.

Many forest enterprises and organizations are celebrating the holiday with good results. In 7 months of this year young trees were planted on 840,000 hectares and throughout the five-year plan on 8 million hectares. Measures for tree planting in ravines, sand dunes and other areas unsuitable for agriculture have been fulfilled. Considerable work has been done to improve the fire resistance of plantings, create a system of fire resistant barriers, develop and strengthen ground and aviation services and use biological methods to protect forests from pests and diseases.

The Kama Lespromkhoz in the Tatar ASSR, the Bobrovskiy Forest Combine in Altay Kray, the Telekhany Leskhoz [State forestry establishment] in Brest Oblast and the Solnechnogorsk Forest Combine in Moscow Oblast have undertaken an initiative to accelerate scientific-technical progress and improve efficiency.

During the current five-year plan the USSR Ministry of the Timber, Pulp and Paper and Woodprocessing Industry and the USSR State Committee for Forestry have fulfilled the housing construction plan by 107 percent, building and putting into operation 5.9 million square meters of housing, general educational schools for 19,610 students, preschool institutions for 26,175, hospitals for 1,190 and clubs for 9,850.

Enterprises in the Timber, Pulp and Paper and Wood Processing Industry annually do major repair work on 1.8 million square meters of housing, supply central and local hot steam heating to about 150,000 square meters of housing and gas to 20,000 apartments. In the past 4 years alone, 620 million rubles were spent to to improve settlements.

However, we consider all this only the beginning of work which we must do during the rest of 1985 and during the 12th Five-Year Plan. After all, housing and living conditions do not everywhere meet modern requirements. Therefore we consider their improvements and improvements in trade, cultural and other services to workers to be among the important tasks.

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## FORESTRY AND TIMBER

### RATIONAL USE OF SIBERIAN TIMBER RESOURCES URGED

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 12 Sep 85 p 2

[Article by academician A. Isayev: "Siberia's Timber Potential"]

[Text] The Siberian taiga is not accidentally called the planet's "green ocean." The comparison with the world ocean is based not so much on size as on the scale of effect on the environment and on the formation of the chemical and thermal regime of reservoirs and the gas balance of the atmosphere. Such an evaluation of the planetary importance of Siberian forests signifies the need for their preservation for maintaining an equilibrium in nature. At the same time, the forest was and remains an irreplaceable raw material base for many industrial sectors. How to reconcile these two contradictory needs? There is one way out--to increase the efficiency of utilization of timber resources in the maximum possible way.

The circumstances are such that for many years we have seemingly taken loans from nature, counting on its countless wealth. However, is Siberia's "green ocean" really so boundless? In fact, 500 million hectares of forests are concentrated in Siberia and the Far East. The estimated felling area is set at 279 million cubic meters. Today, however, we utilize this potential only 36 percent. Department workers usually cite these data as evidence of the inexhaustibility of our timber resources.

In fact, however, the present state of Siberian forests evokes serious concern. Their raw material resources have been depreciated noticeably, owing to the fact that timber procurements greatly outstrip timber processing. At the same time, the estimated reserves of coniferous species are realized only 40 percent and of broad-leaved species, 11 percent. Valuable small-scale commodity coniferous and broad-leaved timber remains on felling areas. Birch and aspen essentially are not utilized at all. In fact, such an orientation toward the procurement of heavy timber leads to the squandering of timber resources.

The present stage in Siberia's development requires a fundamentally new approach to the protection and utilization of its natural resources. The following was noted at the conference of the party and the economic aktiv in Tyumen and Tomsk oblasts: In Siberia and the Far East, at the places where the extraction of fuel and raw materials is concentrated, there are the

greatest possibilities for their overall utilization. Unfortunately, for the time being the situation with respect to forest utilization is worst of all. The production of the final product per cubic meter of procured timber in Siberia is one-half of that in the entire country.

A fundamental solution of the problem is seen in the formation of regional waste-free production facilities, at which enterprises different in terms of waste would be linked into unified industrial complexes. For this, along with retooling the sector, it is necessary to solve a number of organizational problems.

First of all, it is time to stop the squandering of timber resources by officials procuring on their own behalf, who account for about 20 percent of the total procurement volume. At times the situation reaches the point of absurdity. The Ministry of the Timber, Pulp and Paper, and Wood Processing Industry begins to develop the raw material base allocated by the USSR State Planning Committee, establishes production capacities in new regions and builds roads and settlements. When an enterprise is put into operation, it turns out that little remains of the estimated felling area--officials procuring on their own behalf have already taken everything that is valuable from it.

More than 80 enterprises of officials procuring on their own behalf now operate in Irkutsk Oblast alone. Selecting the best timber, they leave all the rest on the felling area. As a result, cutting areas are cluttered up, regrowth is ruined and soil is destroyed. The production cost of timber procured in this way is twice or three times higher than in the system of the Ministry of the Timber, Pulp and Paper, and Wood Processing Industry. It seems that the time has come to transfer enterprises of officials procuring on their own behalf together with resources to the USSR Ministry of the Timber, Pulp and Paper, and Wood Processing Industry.

The responsibility of those who continue to be oriented toward wasteful technologies is a special subject. The USSR Ministry of Power and Electrification, the USSR Ministry of the Timber, Pulp and Paper, and Wood Processing Industry and the USSR State Committee for Forestry cannot find a common language, when it is a matter of the flooding of many thousands of hectares of valuable forests during the filling of reservoirs. This was the case during the construction of Bratskaya, Sayano-Shushenskaya and Zeyskaya GES [hydroelectric power stations]. Such a practice also continues now. In July the Commission of the Presidium of the USSR Council of Ministers for Environmental Protection and Rational Utilization of Natural Resources was forced to note the unsatisfactory fulfillment of nature protection measures during the construction of Bureyskaya and Boguchanskaya GES.

Unfortunately, sectorial science does not pay proper attention to this problem. It seems that it would be advisable to specialize one of the institutes of the USSR Ministry of the Timber, Pulp and Paper, and Wood Processing Industry in the development of technology and equipment for cleaning the channels of reservoirs of future GES--Podkamenno-Tungusskaya, Sredne-Yeniseyskaya, Osinovskaya and Igarskaya.

Problems of an overall processing of raw timber materials are also solved in an intolerably slow manner. In Siberia today its level is two-thirds to one-half of the all-Union level and one-fourth to one-fifth of the foreign level. In Siberia to this day essentially there is no single permanent complex, on whose example it would be possible to study and disseminate advanced experience in the exploitation of forests, complete processing of the timber mass and utilization of all its useful components.

At one time the USSR Ministry of the Timber, Pulp and Paper, and Wood Processing Industry adopted a decision to make the Yemelyanovskiy Experimental Timber Industry Establishment in Krasnoyarsk Kray such a model enterprise. However, it did not back the decision with capital investments, or with material and technical resources.

The lag in the development of intensive chemical and chemicomechanical timber processing is especially great.

A hydrolysis-yeast plant has been planned as part of the first stage of the Ust-Ilimskiy Timber Industry Complex. It has been designed on a single industrial site and all utility lines have been laid with due regard for it. Only the plant itself, to this day, does not exist. As a result, basic production waste--valuable raw materials for feed protein--is destroyed. The plant's completion would greatly increase the efficiency of the entire complex.

Hundreds of thousands of cubic meters of waste--excellent raw materials, for example, for the output of wood particle and wood fiber boards--remain on Siberia's felling area every year. Their production would be repaid here in less than 1 year. To this day, however, the necessary capacities have not been established. As a result, boards, as well as furniture, are brought to Siberia from the country's European part, while trains with unprocessed round timber--up to 12 million cubic meters annually--are going in the opposite direction.

Today even Siberia's large timber industry complexes do not have a completed cycle of intensive processing. The payment for this is excessively high. For example, the lack of a pulp and paper combine at the Yeniseyskiy Complex leads to vast losses in the form of sawmilling waste. Nearby, in Irkutsk Oblast, commercial Angarsk pine, which is the best in the world, is crushed into chips for the Bratsk Pulp and Paper Combine. Yet an overall utilization of bolt timber makes it possible to obtain more than 1 million cubic meters of industrial chips annually, which is equivalent to the preservation of 10,000 hectares of forests from felling.

In order to ensure the implementation of the strategy of an overall utilization of timber resources, during the forthcoming five-year plan it is necessary to reconstruct and retool primarily the operating enterprises that have already selected coniferous raw materials from their timber bases. At the same time, it should be taken into consideration that the level of automation in timber industry production in Siberia is not high. For example, labor expenditures per cubic meter of sawn timber are 2 or 2.5 times higher here than at the best enterprises. Under Siberia's conditions the problem of



saving labor resources requires special attention. Therefore, reconstruction and retooling should be maximally directed toward a broad mechanization and automation of processes and the establishment of "unmanned" production facilities.

It is high time to also put an end to such a scandalous squandering as burning the waste of wood processing production. The Ministry of the Timber, Pulp and Paper, and Wood Processing Industry should give serious thought to how to increase the procurement of timber of soft broad-leaved species and utilize it at existing pulp-paper and hydrolysis-yeast enterprises and in the production of wood particle boards and feed products. The task is, with a planned twofold increase in the volume of timber procurements in Siberia, to raise the level of timber processing three- to fourfold.

With what measures is it possible to force departments to take an active part in the solution of this problem? In our opinion, cost accounting principles should be more boldly utilized in territorial-sectorial relations. First of all, this should be expressed in the introduction of an obligatory payment for the utilization of natural resources. The sector should deduct part of the profit for the utilization of the territory's resources, be it timber, iron ore or petroleum, into the budget of local soviets. Then the Ministry of the Timber, Pulp and Paper, and Wood Processing Industry will not seek a permit "as an exception" for standard clear fellings. Today these "one-time permits" for a department are the easiest ways to fulfill the plan and for a territory, a barbaric destruction of timber bases. Then the "second floors" of Ust-Ilimskiy and other lopsided complexes will be completed and the country will receive advanced types of products.

The session of the USSR Supreme Soviet held in July adopted a decision to develop a long-term state program for environmental protection and rational utilization of natural resources in the USSR. Extensive work is ahead. Right now, however, it is necessary to take the most decisive measures to stop mismanagement and squandering in the utilization of timber resources.

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## FORESTRY AND TIMBER

### CHIP, WOOD FIBER BOARD PRODUCTION LAG NOTED

Moscow LESNAYA PROMYSHLENNOST in Russian 27 Aug 85 p 1

[Article by V. Pintus, chief, Production Administration for Wood Board and Veneer, USSR Minlesbumprom [Ministry of the Timber, Pulp and Paper and Wood Processing Industry]: "Overcome Lagging"]

[Text] The ninth, high pressure ten day period is being completed in honor of the forthcoming 27th CPSU Congress. What results does USSR Minlesbumprom's board industry have to show for this?

Before answering this, I will note that the start of the year was exceptionally hard for the subsector. Fuel shortages, cutbacks in electricity and disruptions in raw materials supplies put many enterprises in a difficult situation. More importantly, perhaps, a considerable share of them were not as ready as they should have been for winter work and were clearly knocked out of rhythm.

In the second and the first half of the third quarter a number of units caught up with the schedule and made up shortfalls. The seven month production plan was successfully fulfilled by the VPO's [All-Union Production Association] Vostokmebel [Eastern Furniture] and Yugmebel [Southern Furniture], the Soyuzlesdrevprom [Timber and Wood Industry], Soyuzlesoeksport [Timber Export], Soyuztsellyuloza [Cellulose], Soyuzfanspichprom [Plywood and Matches], Soyuznauchplotprom [Possibly: Board Scientific Research] Associations, the Bratsk [Forest Industries Complex], the Sharyadrev PDO [not further identified], and ministries of the Ukrainian, Latvian, Kazakh, Lithuanian SSR and others. Enterprises in these units produced more than 8 million square meters of wood fiber board in addition to the plan.

Nevertheless, the subsector still has a large debt, more than 6 million square meters of products. Glavstandartdom's [Main Administration for Standard Housing] (comrade Fedorov) work defies description -- it is in debt by more than 6,254,000 square meters of wood fiber board. Four of the six wood fiber board plants in the main administration are not fulfilling their plans. The VPO Zapadmebel has only handled 85.3 percent of its plan. There is cause for concern about the situation at Permlesprom [Perm Timber Industry] and at the ministries in Estonia and Belorussia.

In justifying their bad work, managers of the lagging enterprises and some times even those of some superior organizations refer to equipment quality. It cannot be denied that the DVP [Wood fiber board]-15 line has shortcomings. However, it is noteworthy that using this same equipment the Knyazhpogostskiy Plant (comrade Shcherbovich) produced 1,135,000 square meters of board in a month, while at the same time monthly output at the Pyussisk Plant did not exceed 850,000, at the Bobruyskiy -- 714,000 and at the Maksatikhinskiy DOK [Woodworking combine] -- 200,000-250,000 square meters. However, the Knyazhpogostskiy Wood Fiber Board Plant's experience is not studied or utilized.

How can one justify the poor work of the Shchekino Wood Fiber Board Plant (comrades Maratayev and Kiselev), which in 7 months were 1,769,000 square meters short of the plan? In the winter, having sufficient raw material at the enterprise, they were not able to organize its planned delivery to production operations. In the second quarter, because of poor preparations, major repairs were done poorly, while in July the DSP [wood chip board] and DVP plants were inoperative for long times due to emergencies in the electrical supply system.

The Yayvinskiy DBP Plant in the Permlеспrom Association suffers in the same way, it sits idle due to shortages of steam or raw materials.

It is quite obvious that all these problems and lack of coordination are the consequences of disorganization, incompetent leadership and weak engineering support -- things which cannot be tolerated.

The chipboard production situation is similar in many ways. After serious disruptions in the first quarter, associations such as Tsentromebel, Yugmebel, Vostokmebel, Soyuznauchplitprom, Soyuzleseksprom, Soyuzbumaga, the ministries in Belorussia, Azerbaijan, Estonia, Latvia, Moldavia and other SSR's have overcome lagging and are fulfilling and overfulfilling their plans. In seven months they have manufactured more than 53,000 cubic meters of board. Nevertheless, this only an insignificant reduction (6,000 cubic meters) in the shortfall formed since the beginning of the year.

These units are working below their potential: Soyuzfanspichprom (comrade Fedorov), Sevzapmebel (comrade Chudovskiy) Kostromalesprom (comrade Averochkin), Zapadmebel (comrade Mityukov). the ministry in the Ukraine (comrade Grunianskiy) and Glavstandartdom (comrade Fedorov). Incomplete staffing and poor training, frequent breakdowns due to poorly organized operation and repairs, formalism in questions of socialist competition and in the use of the brigade form of labor organization are the reasons for this situation.

Work results for the first half of August show that enterprises in the VPO Soyuzfanspichprom (Verkhnesinyachikhinskiy and Zheshartskiy combines and the Baykal FSK [Veneer combine]) are still lagging; that plants in the VPO Zapmebel have not reached their daily schedule; plans are not being fulfilled

by enterprises in the Ukrainian ministry (Kalinovskiy EZDP [not further identified], the Osmoloda timber combine and the Kostoposkiy DSK, and that work has not improved at the Odnokhiyskiy and Uvinskiy DSP plants in the Soyuzlesdrevprom Association.

Time marches on. Managers at ministries, VPO's and lagging enterprises must quickly learn the reasons for the disruptions; increase the responsibility of all woodworkers, from worker to director and, in deeds not in words, undertake a program of technical progress and production intensification.

There must be constant supervision over the training of all cadre for work in winter conditions, using last year's lessons.

It is necessary to immediately strengthen technical services for repair, and organize, at each plant, the component, modular repair of all equipment at DSP and DVP lines.

Now, at the finish of the five-year plan the efforts of each collective, worker and engineer should be concentrated upon overcoming lagging. There are possibilities for this and it is our common duty to fully use them.

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